

## **Cost-Benefit Analysis – Agreement State Travel Reimbursement Contracts**

### **Summary**

In response to the recommendation contained in the Office of the Inspector General (OIG) report OIG-18-A-18, “Audit of NRC’s Process for Reimbursing Agreement State Personnel Training Expenses,” the Nuclear Regulatory Commission (NRC) staff developed a cost-benefit analyses for two models: establishing travel expense reimbursement contracts with 38 Agreement States and Vermont (anticipated to be an Agreement State on September 30, 2019), and with the six States that have a policy that prohibits their staff from receiving travel reimbursements at any rate other than the prescribed State per diem rate. The cost benefit analyses indicate that neither model would be cost effective and would result in a net loss of funds over the 30-year period that was analyzed.

### **Purpose**

To perform a cost-benefit analysis that compares the current Agreement State travel reimbursement process (travel reimbursement paid directly by the NRC to the Agreement State traveler at the prescribed U. S. General Services Administration (GSA) rates) against establishing travel expense reimbursement contracts with individual Agreement States. The analysis includes an estimate of the funds saved/expended (i.e., monetized full-time equivalent resource estimates) by establishing and maintaining the contracts, including the monitoring of the Agreement State travel expenditures and annual Agreement State travel per diem rates.

### **Background**

In its report, the OIG made one recommendation related to the NRC’s process for reimbursing Agreement State staff who attend NRC-sponsored training. Specifically, the OIG recommended that the NRC staff:

*Conduct a cost-benefit analysis to evaluate alternative Agreement State reimbursement options, such as establishment of contracts with individual Agreement States to facilitate reimbursement at the State per diem rate not to exceed the Federal per diem rate.*

On October 18, 2018 (Agencywide Documents Access and Management System (ADAMS) Accession Number ML18291B238), the NRC provided a response to the recommendation in the OIG report and agreed in part and disagreed in part with the recommendation. Specifically, the NRC staff disagreed that multiple options are available for which the NRC staff could perform a cost-benefit analyses. As stated in the response:

*Two reimbursement options have already been evaluated and eliminated (i.e., reimburse directly at the State per diem rate, and continue to reimburse at the Federal per diem rate and request that Agreement States with travel reimbursement policies that require their employees to only receive the State per diem rate on official work-related travel, send the difference in per diem rates to the NRC).*

However, the NRC staff’s response did commit to the following action:

*The NRC staff agrees to conduct a cost-benefit analysis of the feasibility of establishing travel expense reimbursement contracts with individual Agreement States.*

**Enclosure**

## Methodology

To establish baseline data for the cost-benefit analysis, the NRC staff surveyed the 38 Agreement States and Vermont (anticipated effective Agreement of September 30, 2019) to establish which States have a policy that prohibits their staff from receiving travel reimbursements at any rate other than the prescribed State per diem rate. Six Agreement States (California, Iowa, Louisiana, Maryland, Pennsylvania, and South Carolina) reported that they have a policy that prohibits their staff from receiving travel reimbursements at any rate other than the prescribed State per diem rate. Thirty-two Agreement States and Vermont indicated that their staff can accept the GSA reimbursement rates including the current standard rate of \$94 for lodging and \$55 for meals and incidental expenses (M&IE).

As part of the survey, the NRC staff also requested that the 38 Agreement States and Vermont provide their standard State travel reimbursement rate (lodging and M&IE). The survey results indicate the following: 15 Agreement States use the GSA reimbursement rates including the GSA standard rate, 10 Agreement States use their own reimbursement rates (different from the GSA reimbursement rates), and 13 Agreement States and Vermont did not provide exact values for their standard reimbursement rates. For those States where no or partial standard reimbursement rates were provided, conservative values of \$80 for lodging and \$42 for M&IE were used, as appropriate, in the analysis.

The Organization of Agreement States provided feedback prior to the survey indicating that the NRC staff should evaluate the establishment of reimbursement contracts for only those Agreement States participating in the NRC-provided travel and training program that have current policies in place that require their employees to surrender their Federal per diem travel reimbursement to the State and the State reimburses the employee at their respective State rates. As a result, the NRC staff performed two cost benefit analyses: an analysis of the benefit of developing travel reimbursement contracts with the current 38 Agreement States plus Vermont (39-State model) and with those six States that have a policy that prohibits staff from receiving travel reimbursements at any rate other than the prescribed State per diem rate (6-State model).

Both cost-benefit analyses were performed for a 30-year period and included several conservative assumptions and estimates:

- Both the GSA standard reimbursement rate and individual State standard reimbursement rates for lodging expenses and M&IE were used and would remain constant,
- Each NRC-provided training slot requires five days of travel,
- Annual per-State travel for NRC-provided training parallels the Agreement State demand for NRC-provided training slots and the demand is based on the current 3-year average (2017-2019) and remains constant,
- The NRC mission-related productive hours (1 full time equivalent (FTE) = 1,510 hours) and associated hourly rate (\$278 per hour) would remain constant,
- The Agreement State travel and training budget remains fixed,

- The NRC development of a draft template reimbursement contract would require at least 40 hours (combined staff and legal support) and a minimum of 4 hours per state to negotiate and implement the contract,
- The NRC resources needed for reimbursement contract renewal would require a minimum of 2 hours per state and occur on a 5-year cycle,
- The current budget and the necessary resource expenditure to support Agreement State training and travel coordination (i.e., travel authorization/voucher work) would remain 1 FTE = 1,510 hours per year,
- Baseline cost-reimbursement contract management requires a minimum 38 hours per contract annually (about 1 hour per week), and
- To account for uncertainty in the contract management resource estimate, a 15 percent contingency was added to the estimate.

As part of the cost-benefit analysis, for each State, the NRC staff calculated the annual lodging and M&IE difference between the GSA standard reimbursement rate and individual State standard reimbursement rate. In all instances, the GSA standard reimbursement rate was greater than or equal to the respective State reimbursement rate. The calculation involved taking the reimbursement difference between the two rates and multiplying it by 5 (assumed 5-day training period) and the State's current 3-year average of training slots provided by the NRC. For example, for California, with an average of 20 training slots per year and a State standard reimbursement rate of \$90 for lodging and \$46 for M&IE:  $20 \text{ (slots)} * 5 \text{ (days)} * ((94 - 90) + (55 - 46)) = \$1,300$  annually in savings.

The cost-benefit analysis also included an evaluation and estimate of the initial one-time cost to develop a "template" reimbursement contract (40 hours \* \$278 per hour), one-time initial contract negotiation costs (4 hours per state \* \$278 per hour), and 5-year cycle contract renewal (2 hours per state \* \$278 per hour). For annual contract management costs, the difference between the hours needed to perform the management (1 hour per week per contract \* 38 weeks annually \* number of States with contracts + a 15 percent contingency) and the 1,510 hours per year currently allocated to the Agreement State Travel and Training Coordinator was multiplied by \$278 per hour.

Agreement State expenditures associated with developing and implementing reimbursement contracts were not considered in the analysis. In the current Agreement State travel reimbursement process, where travel reimbursement is paid directly by the NRC to the Agreement State traveler, the Agreement States have no role in the process and their expenditures are zero. Developing and implementing travel reimbursement contracts for the NRC-provided training of their employees will result in a significant added resource burden to the Agreement State programs.

## Findings

For the 39-State model, the annual total cost saving associated with developing reimbursement contracts with all 38 Agreement States and Vermont is \$28,160. This cost savings is based on the calculated annual lodging and M&IE difference between the GSA standard reimbursement rate and individual State standard reimbursement rate, as described above, for the 38 Agreement States and Vermont.

The 39-State model cost expenditures for developing reimbursement contracts include one-time costs for the development of a “template” reimbursement contract (\$11,120), on-time initial contract negotiation costs (\$43,368), and contract renewal on a 5-year cycle (\$21,684). Of note is the annual contract management expenditure which is estimated to require 194 hours above the current 1,510 hours (1 FTE) budgeted for the Agreement State Travel and Training Coordinator (\$54,015). Annual contract management expenses are almost two times the cost savings of applying State rates through reimbursement contracts.

Evaluating the 39-State model cost savings versus the cost expenditures over a 30-year period indicates an initial first-year negative return of \$80,343 (\$28,160 - \$11,120 - \$43,368 - \$54,015) and cumulative 30-year negative return of \$960,254 (\$28,160 - annual \$54,015 for contract management and - \$21,684 for contract renewal on a 5-year cycle).

For the 6-State model, the annual total cost saving associated with developing reimbursement contracts with the six Agreement States that reported a policy that prohibits their staff from receiving travel reimbursements at any rate other than the prescribed State per diem rate is \$7,802. This cost savings is based on the calculated annual lodging and M&IE difference between the GSA standard reimbursement rate and individual State standard reimbursement rate, as described above, for the six restrictive reimbursement policy Agreement States.

The 6-State model cost expenditures for developing reimbursement contracts include one-time costs for the development of a “template” reimbursement contract (\$11,120), one-time initial contract negotiation costs (\$6,672), and contract renewal on a 5-year cycle (\$3,336). The annual contract management expenditure is estimated to require 29 hours above the current 1,510 hours (1 FTE) budgeted for the Agreement State Travel and Training Coordinator (\$8,062).

Evaluating the 6-State model cost savings versus the cost expenditures over a 30-year period indicates an initial first-year negative return of \$18,052 (\$7,802 - \$11,120 - \$6,672 - \$8,062) and cumulative 30-year negative return of \$45,618 (\$7,802 - annual \$8,062 for contract management and - \$3,336 for contract renewal on a 5-year cycle).

## **Conclusion**

Based on the cost-benefit analysis described and documented in this report, the NRC staff concludes that developing travel reimbursement contracts for all 38 Agreement States and Vermont (39-State model) or only for the six Agreement States that have travel reimbursement policies that require their employees to only receive the State per diem rate on official work-related travel (6-State model), is not cost effective and would result in a net loss of funds over the 30-year period that was analyzed.