

**Contributors to the Universal Service Support Mechanism  
Initial Statistical Analysis of Data from the 2006/2007  
Compliance Audits**

By

Office of Inspector General  
Federal Communications Commission

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## **Background and Introduction**

This report contains a statistical analysis of the 2006/2007 audits of contributions made to Universal Service Fund (“USF”) during the year ended December 31, 2005. The data suggest that the contribution component of the USF is at risk and that additional oversight of the management of USF contributions is needed.

Entities that provide interstate telecommunications to the public, or to such classes of users as to be effectively available to the public, for a fee . . . must contribute to the universal service support mechanism.<sup>1</sup> The primary objective of the Inspector General (“IG”) in auditing contributors to USF was to determine compliance of contributors with Federal Communications Commission’s (“FCC” or “Commission”) rules, orders, and interpretive opinions. In addition, the audits were intended to produce data that would provide the basis for statistical estimates of the erroneous payment rate as defined in the Improper Payments Information Act of 2002 (“IPIA”).<sup>2</sup> Under the IPIA, estimates of both the erroneous payment rate and amount of erroneous payments should guide the Commission in assessing risk associated with all USF Programs. Under IPIA standards, a program is at risk if the erroneous payment rate exceeds 2.5 percent and the amount of erroneous payments is greater than \$10 million. Because contributors provide all financial support for all USF Programs, and because many contributors (e.g., telecommunications carriers) can be beneficiaries of USF Programs, e.g., High Cost Support, Rural Health Care support, and Schools and Libraries Support, a consistent application of IPIA to the USF requires estimation of both an erroneous contribution rate and erroneous contribution amount.

To assess compliance and risk, a simple random sample of auditees, i.e., contributors (entities filing FCC Form 499A) was drawn and compliance attestation examinations/audits were completed. Statistical results from a simple random sample of 87 auditees, suggest that the contribution component of the USF mechanism is at risk, and that there are significant problems in the collection of contributions. The erroneous contribution estimated error rate is 5.50 percent.

We found non-compliance on every FCC Rule and Regulation. Indeed, except for one instance, we found material-non-compliances on FCC Rules/Regulations. Of the 87 compliance attestation audits, six audits, or 6.90 percent of the audits, are disclaimed opinions by the auditors. In these six audits, no opinions are provided on whether contributors are in compliance with FCC Rules. The fundamental cause of a disclaimed opinion by an auditor was insufficient information/documentation to render an opinion on

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<sup>1</sup> See 47 U.S.C. § 254(b)(4); 47 C.F.R. §§ 54.706-713.

<sup>2</sup> Pub. L. 107-300, 116 Stat. 2350.

the contributor. Under the IPIA, this is classified as erroneous payment. Auditors gave adverse opinions on 19.54 percent of their compliance attestation examinations. Of the 87 random audits, 57.47 percent were qualified opinions, and only 16.09 percent were unqualified opinions. In summary, there are significant problems in the contribution component of USF, and non-compliance may be more widespread than the results suggest, because of the existence of disclaimed opinions.

### **Contributors to the Universal Service Support Mechanism**

The Commission's rules require all telecommunications carriers providing interstate telecommunications services, and certain other providers of interstate telecommunications, such as providers of interstate telecommunications for a fee on a non-common carrier basis, and payphone providers that are aggregators, to contribute to universal service.<sup>3</sup> In addition, the FCC extended universal service support obligations to providers of interconnected VoIP.<sup>4</sup>

All contributors to universal service must file the Annual Telecommunications Reporting Worksheet (Form 499-A) on an annual basis. This Worksheet reports historical revenue.<sup>5</sup> Most companies<sup>6</sup> are required to file four Quarterly Telecommunications Reporting Worksheets (Form 499-Q) in February, May, August, and November of each year. In the absence of filed forms, USAC estimates revenue for the period in question.<sup>7</sup>

Contributors pay on the basis of reported revenue. Payments are a function of a contribution factor, which, since April 1, 2003, the Commission, has determined quarterly, based on the ratio of total projected quarterly expenses of the universal service support mechanism to the projected collected end-user interstate and international telecommunications revenue, net of projected contributions. Contributors receive invoices and are expected to pay on a monthly schedule. Failure to pay by the due date results in late payment fees.<sup>8</sup>

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<sup>3</sup> 47 C.F.R. §§ 54.706, 54.711, and 54.713.

<sup>4</sup> See *Universal Service Contribution Methodology*, WC Docket Nos. 06-122 and 04-36, CC Docket Nos. 96-45, 98-171, 90-571, 92-237, 99-200, 95-116, and 98-170, Report and Order and Further Notice of Proposed Rule Making, 21 FCC Rcd 7518, FCC 06-94 (Released June 27, 2006). The Commission defines "interconnected VoIP service" as "a service that: (1) Enables real-time, two-way voice communications; (2) Requires a broadband connection from the user's location; (3) Requires Internet protocol-compatible customer premises equipment (CPE); and (4) Permits users generally to receive calls from the public switched telephone network and to terminate calls to the public switched telephone network."

<sup>5</sup> Downward adjustments to the data can be made within one year from the date of the original submission,

<sup>6</sup> If a contributor's contribution to universal service in any given year is less than \$10,000, that contributor is considered a de minimis contributor and will not be required to file a Telecommunications Reporting Worksheet. See 47 C.F.R. § 54.708.

<sup>7</sup> See [www.usac.org](http://www.usac.org).

<sup>8</sup> See 47 C.F.R. §54.713.

FCC rules provide that USF contribution costs may be recovered through interstate telecommunications-related charges to end users.<sup>9</sup> If a contributor chooses to recover its universal service contribution costs through a line item on a customer's bill, the amount of the federal universal service line-item charge may not exceed the interstate telecommunications portion of that customer's bill times the relevant contribution factor.<sup>10</sup>

### **Compliance and IPIA Audits**

In early 2006, the Inspector General (IG) established two objectives that an audit of contributors to the USF mechanism was to achieve. Because the contribution component of USF was not considered at risk,<sup>11</sup> the primary objective of the audit was to determine the extent of compliance of contributors with FCC rules, orders and interpretive rulings. Another objective was to provide the basis for a statistical measure of the erroneous contributions rate so as to better inform future decision making under the IPIA. In order to determine compliance (as captured within the processes associated with the Form 499-A), a compliance attestation audit of contributors corresponding to a unique Filer\_ID was undertaken. With the IG's use of compliance attestation audits, the auditee (management of the contributor) is required to sign an assertion letter acknowledging its responsibility for compliance with applicable requirements Commission rules (*e.g.* 47 C.F.R. §§ 54.701-717), as well as orders governing contribution requirements to the Federal Universal Service Fund<sup>12</sup> and to make specific assertions relative to the auditee's compliance with those rules. Auditors validate or invalidate the assertions, and provide the cause(s) for the failure of an assertion. That is, auditors determine whether a contributor is in compliance with FCC rules and, if the contributor is not in compliance, the auditor provides cause(s) of, or reason(s) for, non-compliance.

Table 1 contains the Assertion Letter that management of an auditee signed. Data generated from compliance attestation audits, which were based on the assertions set out in Table 1, below, were then statistically analyzed.

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<sup>9</sup> See 47 C.F.R. §54.712.

<sup>10</sup> *Id.*

<sup>11</sup> See FCC Report to Congress on Improper Payments, March 31, 2004.

<sup>12</sup> The Commission's USF rules were developed pursuant to Congresses' directives in 47 U.S.C. § 254 and include a series of rule makings and orders initiated in proceedings required in 47 U.S.C. § 254(a)(2). See *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Report and Order, 12 FCC Rcd. 8776 (FCC 97-157) (1997).

**TABLE 1**

Management of [Contributor Name] (the “Contributor”) is responsible for ensuring the Contributor’s compliance with applicable requirements of 47 C.F.R. Part 54, Subpart H of the Federal Communications Commission’s (“FCCs”) Rules, Regulations and Orders governing contribution requirements to the federal Universal Service Fund (“USF”) administered by the Universal Service Administrative Company (“USAC”).

Management has performed an evaluation of the Contributor’s compliance with the applicable requirements of 47 C.F.R. Part 54, Subpart H governing contributions made to the USF during the year ended December 31, 2005, relative to Filer 499 ID No. XXX. Based on this evaluation, we assert that as of **insert date**, the Contributor complied with all applicable requirements of 47 C.F.R. Part 54, Subpart H, in all material respects.

**The Contributor represents the following assertions per the applicable FCC Rules, Regulations and Orders (which are identified herein with each assertion) with respect to contributions made to the USF on revenue during the year ended December 31, 2005, relative to Filer 499 ID No. XXX:**

**A. Part 54: Subpart H – Administration** – The Contributor (Filer 499 ID No. XXX) asserts that it has:

1. 47 C.F.R. § 54.711 – *Contributor reporting requirements* – complied with contributor reporting requirements as follows:
  - a. Calculated and filed the Telecommunications Reporting Worksheet (Form 499-A)<sup>13</sup> with USAC in accordance with the Instructions to the Telecommunications Reporting Worksheet, Form 499-A<sup>14</sup> (“Instructions”) (47 C.F.R. § 54.711 (a)<sup>15</sup>)<sup>16,17,18</sup> in the following manner:
    - i) Block 1: *Contributor Identification Information* – reported information in lines 101 to 112 in accordance with the Instructions (Section III.A<sup>19</sup>).
    - ii) Block 2-A: *Regulatory Contact Information* – reported information in lines 203 to 208 in accordance with the Instructions (Section III.B.1).
    - iii) Block 2-B: *Agent for Service of Process* – reported information in lines 209 to 218 in

<sup>13</sup> Refer to Appendix 1 for the Telecommunications Reporting Worksheet, Annual Filing, OMB 3060-0855, April 2006 (FCC Form 499-A).

<sup>14</sup> Refer to Appendix 2 for the Instructions to the Telecommunications Reporting Worksheet, Form 499-A.

<sup>15</sup> Refer to Appendix 3 for 47 C.F.R. § 54.711(a).

<sup>16</sup> The Instructions to the Telecommunications Reporting Worksheet incorporates 47 C.F.R. § 54.706 (c) relating to the Limited International Revenues Exemption (LIRE).

<sup>17</sup> The Instructions to the Telecommunications Reporting Worksheet incorporates Part 54.708 relating to the De Minimis Exemption.

<sup>18</sup> The Instructions to the Telecommunications Reporting Worksheet incorporates the following FCC Orders: For DSL -- *In the Matter of GTE Telephone Operating Costs*, Memorandum Opinion and Order, Docket No. 98-79, 13 FCC Rcd 22,466, FCC 98-292 (1998); for CPE Bundling -- *In the Matter of Policy and Rules Concerning the Interstate, Interexchange Marketplace*, Report and Order, CC Docket Nos. 96-61, 98-183, 16 FCC Rcd 7418, FCC 01-98 (2001); For Contribution Methodology -- *In the Matter of Federal-State Board on Universal Service*, Report and Order and Second Further Notice of Proposed Rulemaking, Docket Nos. 96-45, 98-171, 90-571, 92-237, 99-200, 95-116, 98-170, 17 FCC Rcd 24,952, FCC 02-329 (2002) (“*First Interim Contribution Methodology Order*”); for IP-in-the-middle -- *In the Matter of Petition for Declaratory Ruling that AT&T’s Phone-to-Phone IP Telephony Services are Exempt from Access Charges*, Order, Docket No. 02-361, 19 FCC RCD 7457, FCC 04-97 (2004); and for Internet Broadband -- *In the Matters of Appropriate Framework for Broadband Access to the Internet Over Wireline Facilities*, Report and Order and Notice of Proposed Rulemaking, Docket Nos. 02-33, 01-337, 95-20, 98-10, 04-242, 05-271, 20 FCC Rcd 14,853, FCC 05-150 (2005).

<sup>19</sup> Contributors filing on a consolidated basis must file a statement certifying that the Contributor meets the requirements outlined in Section II.B.

accordance with the Instructions (Section III.B.2).

- iv) Block 2-C: *FCC Registration and Contact Information* – reported information in lines 221 to 227 in accordance with the Instructions (Section III.B.3).
  - v) Block 3: *Carrier’s Carrier Revenue Information* – reported information in lines 303.1 to 314 in accordance with the Instructions (Section III.C.1 and Section III.C.6) and as follows:
    - a. Reported total revenues (“column a”) in accordance with the Instructions (Section III.C.2 and Section III.C.4).
    - b. Reported interstate revenues (“column d”) and international revenues (“column e”) in accordance with the Instructions (Section III.C.3).
    - c. Reported good faith estimates for interstate revenues (“column b”) and international revenues (“column c”) if interstate and international revenues could not be determined directly from corporate books of account or subsidiary records in accordance with the Instructions (Section III.C.3).
  - vi) Block 4-A: *End-User and Non-Telecommunications Revenue Information* – reported information in lines 403 to 418 in accordance with the Instructions (Section III.C.1 and Section III.C.6) and as follows:
    - a. Reported total revenues (“column a”) in accordance with the Instructions (Section III.C.2 and Section III.C.4).
    - b. Reported interstate revenues (“column d”) and international revenues (“column e”) in accordance with Instructions (Section III.C.3).
    - c. Reported good faith estimates for interstate revenues (“column b”) and international revenues (“column c”) if interstate and international revenues could not be determined directly from corporate books of account or subsidiary records in accordance with the Instructions (Section III.C.3).
  - vii) Block 4-B: *Total Revenue and Uncollectible Revenue Information* – reported information in lines 419 to 423 in accordance with the Instructions (Section III.C.5 and Section III.C.6).
  - viii) Block 5: *Additional Revenue Breakouts* – reported information in accordance with the Instructions as follows:
    - a. Lines 503 to 510 - reported Block 3 Revenues (“column a”) and Block 4 Revenues (“column b”) in accordance with the Instructions (Section III.C.1 and Section III.D).
    - b. Line 511 – reported total revenues (“column a”) and interstate and international revenues (“column b”) in accordance with the Instructions (Section III.D).
  - ix) Block 6: *Certification* – completed lines 601 to 612 in accordance with Instruction (Section III.E).
- b. Maintained, to date, records and documentation to justify information reported in the Telecommunications Reporting Worksheet, including the methodology used to determine projections (47 C.F.R § 54.711(a))<sup>20</sup><sup>21</sup>.

<sup>20</sup> Refer to Appendix 3 for 47 C.F.R § 54.711 (a).

<sup>21</sup> Pursuant to the *First Interim Contribution Methodology Order*, paragraph 34, contributors are required to maintain records and documentation to justify the information reported in the Form 499-A for three years.

<sup>22</sup> Refer to Appendix 4 for 47 C.F.R § 54.712 (a).

<sup>23</sup> Refer to Appendix 5 for 47 C.F.R § 54.713.

2. 47 C.F.R § 54.712(a) – *Carrier recovery of universal service costs from end-users* – (for Contributors who recover USF contribution from their end customers) billed customers a federal universal service line-item charge that does not exceed the interstate telecommunications portion of that customer’s bill times the relevant contribution factor (47 C.F.R § 54.712 (a)<sup>22</sup>).

3. 47 C.F.R § 54.713 – *Contributor’s failure to report or to contribute* – paid USAC the amounts billed by USAC if the contributor had failed to file the Telecommunications Reporting Worksheet and is subsequently billed by USAC (47 C.F.R § 54.713<sup>23</sup>).

Under the IPIA, agencies are required to review all programs and activities they administer and identify those which may be susceptible to significant erroneous payments.<sup>24</sup> Significant erroneous payments are defined as annual erroneous payments in the program exceeding both 2.5 percent of program payments and \$10 million.<sup>25</sup> While the contribution component of the USF support mechanism was determined not to be a significant risk or determined not to have significant erroneous payments (contributions) by USAC and FCC management,<sup>26</sup> the IG instructed USAC to provide a statistically valid estimate of the annual amount of improper contributions. While validating assertions and confirming compliance with Commission rules, auditors were instructed to capture data on both over and under payments of contributions, by telecommunications carriers subject to these regulations. These data were used to estimate the error rate for erroneous contributions for IPIA purposes.

### **Random Sampling**

In our efforts to facilitate audits of Universal Service Programs so that we could determine compliance with FCC rules, the Office of Inspector General (OIG) pulled a random sample of contributors from the universe of contributors that was provided by USAC.

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<sup>24</sup> Memorandum For Heads of Executive Departments and Agencies – Issuance of Appendix C to OMB Circular A-123. Executive Office of the President, Office of Management and Budget. August 10 2006, p 3.

<sup>25</sup> *Id.*, p 4.

<sup>26</sup> See f.n. 11, *supra*.

## Methodology: Sample Size and Variability

The sample is designed to achieve a 95 percent confidence interval that captures the proportion of contributors that are: (1) not in compliance with Commission rules, or (2) made incorrect contributions. This sample design is based on the conclusions of USAC and of the Commission's Office of Managing Director that the contributor component of USF is in compliance with the IPIA<sup>27</sup> and that bounding the proportion of contributors to USF that are *not* in compliance is critical. Sample size,  $n$ , is determined. Data were requested on a historical proportion,<sup>28</sup> denoted  $p$ , of contributors that were not in compliance with FCC Rules or made incorrect payments to the USF. USAC provided several estimates, including the historical estimate of  $p$  (0.157). In addition, USAC provided for a margin of error, denoted  $E$ , of 0.05. In other words, the estimate must be within 0.05 of the true value in either direction. USAC also suggested a margin of error of 0.10. The average of these values of 0.075 is used in this analysis. Using the standard statistical formula for sample size associated with proportions, the sample size is calculated as follows.

$$n = \frac{(z_{\alpha/2})^2 \times p \times (1-p)}{E^2} = \frac{(1.96)^2 \times 0.157 \times (1-0.157)}{(0.075)^2} \cong 90$$

The interval estimate for a Population Proportion is

$$\bar{p} \pm z_{\alpha/2} \sqrt{\frac{\bar{p}(1-\bar{p})}{n}},$$

where  $z_{\alpha/2}$  is the z value corresponding to an area of  $\alpha/2$  in the upper tail of the standard normal probability distribution.

To calculate a confidence interval for a ratio of erroneous disbursements to total

disbursements, the estimator  $\hat{R} = \frac{\bar{y}}{\bar{x}} = \frac{\sum y_i}{\sum x_i}$ , where  $y$  and  $x$  are variables of interest.

The confidence interval is  $\hat{R} \pm z_{\alpha/2} \sqrt{v(\hat{R})}$ , where the entire square root term is the estimated standard deviation of the ratio estimator.<sup>29</sup>

<sup>27</sup> See n. 11. *supra*.

<sup>28</sup> Expert judgment was provided, as well as data by USAC.

<sup>29</sup> All statistical formulas can be found in any standard general statistics textbook. See, e.g., William G. Cochran. *Sampling Techniques*. New York: John Wiley & Sons, Inc., 1963.

## Sample Selection

The sampling used here follows Anderson, Sweeny, and Williams (2004).<sup>30</sup> Given the sample size,  $n$ , and a complete listing of the universe, we selected a simple random sample of  $n$  contributors without replacement. We generated random numbers, one for each element/Filer\_ID in the universe. The random numbers are generated with the function  $+RAND()$  of Microsoft Excel. Then we chose the  $n$  Filer\_IDs corresponding to the  $n$  smallest random numbers as our sample.

## Substitution Errors

Four observations from the contributor random sample could not be audited and replacements were required. USAC selected four substitutes to be audited, however three were selected out of order from the simple random sample that contained extra observations for substitution purposes. The use of these three substitutes in the sample of 90 observations would have created non-quantifiable substitution errors. To avoid substitution errors, we treated the values on these observations or the observations themselves as non-responses. That is, the effective sample size is 87.<sup>31</sup>

## Other Estimation Assumptions

USAC did not provide pre-audit billed contribution amounts for the audit period, and auditors did not provide post-audit changes in billed contribution amounts for the audit period. Therefore, we estimated both the erroneous contribution rate and erroneous contributions amount using two different methodologies. First, we applied a constant or average contribution factor and, then, calculated an estimated erroneous payment rate. In the second methodology, we used data that was provided by USAC on September 18, 2007. This data was from observations in the random sample and contained both pre-audit billed amounts and post-audit changes in billed amounts as calculated by USAC. However, the methodology that USAC used to create this data was not part of the audit process.

First, we calculated the contribution error rate by assuming an average or constant contribution factor  $\tau$ . For auditee  $i$ , let  $B_{pre,i}$  be the billed pre-audit amount for the audit period, and let  $B_{post,i}$  be the billed post-audit amount for the audit period. For auditee  $i$ , the contribution error is:

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<sup>30</sup> David R. Anderson, Dennis J. Sweeny, and Thomas A. Williams. *Essentials of Modern Business Statistics*. Mason, Ohio: South-Western. 2004.

<sup>31</sup> At this time OIG is auditing the appropriate substitutes, and at the completion of those audits, estimated values will be refreshed.

$$USFERR_i = B_{post,i} - B_{pre,i} = \tau \times (A_{423d_i} + A_{423e_i}) - \tau \times (R_{423d_i} + R_{423e_i})$$

Audited USF Interstate Revenue is  $A_{423d_i}$ , and Audited USF International Revenue is  $A_{423e_i}$ . Reported Interstate USF Revenue is  $R_{423d_i}$ , and Reported International USF Revenue is  $R_{423e_i}$ .

We used a ratio estimator such that the IPIA Error Rate for contributors is:

$$\frac{\tau \times \sum_i |(A_{423d_i} + A_{423e_i}) - (R_{423d_i} + R_{423e_i})|}{\tau \times \sum_i (R_{423d_i} + R_{423e_i})} = \frac{\tau \times \sum_i |(AUSF_i - RUSF_i)|}{\tau \times \sum_i RUSF_i} =$$

$$\frac{\sum_i |(AUSF_i - RUSF_i)|}{\sum_i RUSF_i}, \text{ where}$$

$$AUSF_i = (A_{423d_i} + A_{423e_i}) \text{ and } RUSF_i = (R_{423d_i} + R_{423e_i}).$$

Let  $y_i = AUSF_i - RUSF_i$ , then we have

$$\frac{\sum_i |y_i|}{\sum_i RUSF_i}.$$

In our second methodology, we used data supplied by USAC on September 18, 2007. USAC supplied post-audit changes in billed contribution amounts. In addition, USAC provided pre-audit billed amounts for observations in the random sample. Using this data a ratio estimator of the erroneous contribution rate was constructed. See Appendix 2 for details.

### **Estimation of Erroneous Contribution Rates and Compliance Rates**

Our primary results are based on a random sample of 87 Filer\_IDs, where three inappropriate substitutes are deleted from the sample of 90 observations. Estimates from this random sample do not contain substitution errors. For this random sample of 87 observations, there were six disclaimed opinions. For disclaimed opinions, revenue data are not provided nor is an opinion given on compliance with Commission rules. The estimated erroneous contribution rate is 5.50 percent. The lower limit of a 95 percent confidence interval is 2.44 percent, and the upper limit of this 95 percent confidence the interval is 8.56 percent. Reported USF interstate and international revenue are

\$77,266,318,928.21. Assuming an average annual contribution factor of 10.55 percent, the estimated erroneous contributions are \$385 million.<sup>32</sup>

Because \$385 million is greater than the \$10 million threshold established by the IPIA, the contributor component of USF can be considered at risk.<sup>33</sup> The magnitude of the erroneous contribution rate also suggests problems in the administration of the program.

Under the second estimation methodology, the estimated erroneous contribution rate is 6.05 percent. Because USAC does not provide pre-audit billed contribution amounts for the population, the estimated erroneous contribution amount is \$424 million. (See Appendix 2 for details.)

Non-compliance was found on all assertions of TABLE 1. In addition, material non-compliance was found on all assertions/rules. All results from the random sample of 87 audits of the Contributors are contained in Table 2, Table 3, Table 4, and Table 5.

**TABLE 2**

|             |               |       |                |        |
|-------------|---------------|-------|----------------|--------|
|             | Net           | IPIA  |                |        |
| Error Rates | Contributions | ERROR | PAY/NOT BILLED | REFUND |
|             | 2.83%         | 5.50% | 4.16%          | 1.33%  |

**TABLE 3**

IPIA Results with a 95% Confidence Interval

|          |             |            |                 |            |            |          |
|----------|-------------|------------|-----------------|------------|------------|----------|
| IPIA     |             |            |                 |            |            |          |
| Error    | VARIANCE    | STD        | Margin of Error | Confidence | Lower      | Upper    |
| Rate     | 0.000243956 | 0.01561909 | 0.030613        | Limit      | 0.02435438 | 0.085581 |
| 0.054968 |             |            |                 |            |            |          |

**TABLE 4**

PAY/NOT BILLED Results with a 95% Confidence Interval

|          |             |          |             |            |          |          |
|----------|-------------|----------|-------------|------------|----------|----------|
| Error    |             |          |             |            |          |          |
| Rate     | VARIANCE    | STD      | Margin of   | Confidence | Lower    | Upper    |
| Pay/Not  | 0.000168638 | 0.012986 | Error       | Limit      | 0.016169 | 0.067075 |
| Billed   |             |          | 0.025452672 |            |          |          |
| 0.041622 |             |          |             |            |          |          |

**TABLE 5**

Exact Confidence Interval: Binomial Variable\*\*\*

<sup>32</sup> See Appendix 1, Calculation of Erroneous Contribution.

<sup>33</sup> On September 18, 2007, USAC provided pre-audit billed amounts of contribution and post-audit changes in billed amounts of contribution for the simple random sample. The estimated erroneous payment rate is 6.05%. See Appendix 2.

Contributors  
Random Sample Size = 87

12-Sep-07

Assertion A1a1:  
(CONTRIBUTOR ID)

|                             | Observed<br>Occurrences | Sample<br>Size<br>N | Significance<br>Level | Proportion<br>P | Confidence   | Confidence   |
|-----------------------------|-------------------------|---------------------|-----------------------|-----------------|--------------|--------------|
|                             |                         |                     |                       |                 | Limit        | Limit        |
|                             |                         |                     |                       |                 | Lower<br>P_L | Upper<br>P_U |
| 0-Compliance                | 76                      | 81                  | 5.00%                 | 93.83%          | 86.18%       | 97.97%       |
| Non-Compliance*             | 5                       | 81                  | 5.00%                 | 6.17%           | 2.03%        | 13.82%       |
| 1-Material Non-Compliance** | 3                       | 81                  | 5.00%                 | 3.70%           | 0.77%        | 10.44%       |

Assertion A1a2:  
(REGULATORY CONTACT  
INFORMATION PROVIDED)

|                             | Observed<br>Occurrences | Sample<br>Size<br>N | Significance<br>Level | Proportion<br>P | Confidence   | Confidence   |
|-----------------------------|-------------------------|---------------------|-----------------------|-----------------|--------------|--------------|
|                             |                         |                     |                       |                 | Limit        | Limit        |
|                             |                         |                     |                       |                 | Lower<br>P_L | Upper<br>P_U |
| 0-Compliance                | 78                      | 81                  | 5.00%                 | 96.30%          | 89.56%       | 99.23%       |
| Non-Compliance*             | 3                       | 81                  | 5.00%                 | 3.70%           | 0.77%        | 10.44%       |
| 1-Material Non-Compliance** | 3                       | 81                  | 5.00%                 | 3.70%           | 0.77%        | 10.44%       |

Assertion A1a3:  
(AGENT FOR SERVICE OF PROCESS  
PROVIDED)

|                             | Observed<br>Occurrences | Sample<br>Size<br>N | Significance<br>Level | Proportion<br>P | Confidence   | Confidence   |
|-----------------------------|-------------------------|---------------------|-----------------------|-----------------|--------------|--------------|
|                             |                         |                     |                       |                 | Limit        | Limit        |
|                             |                         |                     |                       |                 | Lower<br>P_L | Upper<br>P_U |
| 0-Compliance                | 63                      | 80                  | 5.00%                 | 78.75%          | 68.17%       | 87.11%       |
| Non-Compliance*             | 17                      | 80                  | 5.00%                 | 21.25%          | 12.89%       | 31.83%       |
| 1-Material Non-Compliance** | 3                       | 80                  | 5.00%                 | 3.75%           | 0.78%        | 10.57%       |

Assertion A1a4:  
(FCC REGISTRATION NUMBER  
PROVIDED)

|                             | Observed<br>Occurrences | Sample<br>Size<br>N | Significance<br>Level | Proportion<br>P | Confidence   | Confidence   |
|-----------------------------|-------------------------|---------------------|-----------------------|-----------------|--------------|--------------|
|                             |                         |                     |                       |                 | Limit        | Limit        |
|                             |                         |                     |                       |                 | Lower<br>P_L | Upper<br>P_U |
| 0-Compliance                | 76                      | 81                  | 5.00%                 | 93.83%          | 86.18%       | 97.97%       |
| Non-Compliance*             | 5                       | 81                  | 5.00%                 | 6.17%           | 2.03%        | 13.82%       |
| 1-Material Non-Compliance** | 4                       | 81                  | 5.00%                 | 4.94%           | 1.36%        | 12.16%       |

Assertion A1a5a:  
(CARRIER'S CARRIER REVENUE  
INFORMATION PROVIDED)

| Reported Total Revenue | Observed<br>Occurrences | Sample<br>Size<br>N | Significance<br>Level | Proportion<br>P | Confidence   | Confidence   |
|------------------------|-------------------------|---------------------|-----------------------|-----------------|--------------|--------------|
|                        |                         |                     |                       |                 | Limit        | Limit        |
|                        |                         |                     |                       |                 | Lower<br>P_L | Upper<br>P_U |

|                             |    |    |       |        |        |        |
|-----------------------------|----|----|-------|--------|--------|--------|
| 0-Compliance                | 28 | 69 | 5.00% | 40.58% | 28.91% | 53.08% |
| Non-Compliance*             | 41 | 69 | 5.00% | 59.42% | 46.92% | 71.09% |
| 1-Material Non-Compliance** | 34 | 69 | 5.00% | 49.28% | 37.02% | 61.59% |

Assertion A1a5b:

(CARRIER'S CARRIER

REPORTED INTERSTATE REVENUES)

|                             | Observed Occurrences | Sample Size | Significance Level | Proportion | Confidence Limit Lower | Confidence Limit Upper |
|-----------------------------|----------------------|-------------|--------------------|------------|------------------------|------------------------|
|                             | X                    | N           | Level              | P          | P_L                    | P_U                    |
| 0-Compliance                | 29                   | 68          | 5.00%              | 42.65%     | 30.72%                 | 55.23%                 |
| Non-Compliance*             | 39                   | 68          | 5.00%              | 57.35%     | 44.77%                 | 69.28%                 |
| 1-Material Non-Compliance** | 33                   | 68          | 5.00%              | 48.53%     | 36.22%                 | 60.97%                 |

Assertion A1a5c:

(CARRIER'S CARRIER REPORTED

GOOD FAITH INTERSTATE ESTIMATE

|                             | Observed Occurrences | Sample Size | Significance Level | Proportion | Confidence Limit Lower | Confidence Limit Upper |
|-----------------------------|----------------------|-------------|--------------------|------------|------------------------|------------------------|
|                             | X                    | N           | Level              | P          | P_L                    | P_U                    |
| 0-Compliance                | 16                   | 28          | 5.00%              | 57.14%     | 37.18%                 | 75.54%                 |
| Non-Compliance*             | 12                   | 28          | 5.00%              | 42.86%     | 24.46%                 | 62.82%                 |
| 1-Material Non-Compliance** | 12                   | 28          | 5.00%              | 42.86%     | 24.46%                 | 62.82%                 |

Assertion A1a6a:

(END-USER & NON-TELECOM

REPORTED TOTAL REVENUES)

|                             | Observed Occurrences | Sample Size | Significance Level | Proportion | Confidence Limit Lower | Confidence Limit Upper |
|-----------------------------|----------------------|-------------|--------------------|------------|------------------------|------------------------|
|                             | X                    | N           | Level              | P          | P_L                    | P_U                    |
| 0-Compliance                | 19                   | 81          | 5.00%              | 23.46%     | 14.75%                 | 34.18%                 |
| Non-Compliance*             | 62                   | 81          | 5.00%              | 76.54%     | 65.82%                 | 85.25%                 |
| 1-Material Non-Compliance** | 56                   | 81          | 5.00%              | 69.14%     | 57.89%                 | 78.93%                 |

Assertion A1a6b:

(END-USER & NON-TELECOM

REPORTED INTERSTATE REVENUES)

|                             | Observed Occurrences | Sample Size | Significance Level | Proportion | Confidence Limit Lower | Confidence Limit Upper |
|-----------------------------|----------------------|-------------|--------------------|------------|------------------------|------------------------|
|                             | X                    | N           | Level              | P          | P_L                    | P_U                    |
| 0-Compliance                | 22                   | 81          | 5.00%              | 27.16%     | 17.87%                 | 38.19%                 |
| Non-Compliance*             | 59                   | 81          | 5.00%              | 72.84%     | 61.81%                 | 82.13%                 |
| 1-Material Non-Compliance** | 47                   | 81          | 5.00%              | 58.02%     | 46.54%                 | 68.91%                 |

Assertion A1a6c:

(END-USER & NON-TELECOM

REPORTED GOOD FAITH ESTIMATES)

|  | Observed Occurrences | Sample Size | Significance Level | Proportion | Confidence Limit Lower | Confidence Limit Upper |
|--|----------------------|-------------|--------------------|------------|------------------------|------------------------|
|  | X                    | N           | Level              | P          | P_L                    | P_U                    |

|                             |    |    |       |        |        |        |
|-----------------------------|----|----|-------|--------|--------|--------|
| 0-Compliance                | 12 | 27 | 5.00% | 44.44% | 25.48% | 64.67% |
| Non-Compliance*             | 15 | 27 | 5.00% | 55.56% | 35.33% | 74.52% |
| 1-Material Non-Compliance** | 12 | 27 | 5.00% | 44.44% | 25.48% | 64.67% |

Assertion A1a7: Block 4-B  
(TOTAL REVENUE &  
UNCOLLECTIBLE REVENUE)

|                             | Observed<br>Occurrences | Sample<br>Size | Significance<br>Level | Proportion<br>P | Confidence<br>Limit<br>Lower<br>P_L | Confidence<br>Limit<br>Upper<br>P_U |
|-----------------------------|-------------------------|----------------|-----------------------|-----------------|-------------------------------------|-------------------------------------|
| 0-Compliance                | 25                      | 81             | 5.00%                 | 30.86%          | 21.07%                              | 42.11%                              |
| Non-Compliance*             | 56                      | 81             | 5.00%                 | 69.14%          | 57.89%                              | 78.93%                              |
| 1-Material Non-Compliance** | 46                      | 81             | 5.00%                 | 56.79%          | 45.31%                              | 67.76%                              |

Assertion A1a8a: Block 5 –  
(ADDITIONAL REVENUE, LINES 503-510)

|                             | Observed<br>Occurrences | Sample<br>Size | Significance<br>Level | Proportion<br>P | Confidence<br>Limit<br>Lower<br>P_L | Confidence<br>Limit<br>Upper<br>P_U |
|-----------------------------|-------------------------|----------------|-----------------------|-----------------|-------------------------------------|-------------------------------------|
| 0-Compliance                | 53                      | 59             | 5.00%                 | 89.83%          | 79.17%                              | 96.18%                              |
| Non-Compliance*             | 6                       | 59             | 5.00%                 | 10.17%          | 3.82%                               | 20.83%                              |
| 1-Material Non-Compliance** | 5                       | 59             | 5.00%                 | 8.47%           | 2.81%                               | 18.68%                              |

Assertion A1a8b: Block 5 - Additional  
(ADDITIONAL REVENUE, LINES 511)

|                             | Observed<br>Occurrences | Sample<br>Size | Significance<br>Level | Proportion<br>P | Confidence<br>Limit<br>Lower<br>P_L | Confidence<br>Limit<br>Upper<br>P_U |
|-----------------------------|-------------------------|----------------|-----------------------|-----------------|-------------------------------------|-------------------------------------|
| 0-Compliance                | 43                      | 48             | 5.00%                 | 89.58%          | 77.34%                              | 96.53%                              |
| Non-Compliance*             | 5                       | 48             | 5.00%                 | 10.42%          | 3.47%                               | 22.66%                              |
| 1-Material Non-Compliance** | 5                       | 48             | 5.00%                 | 10.42%          | 3.47%                               | 22.66%                              |

Assertion A1a9: Block 6-  
(CERTIFICATION, LINES 601-612)

|                             | Observed<br>Occurrences | Sample<br>Size | Significance<br>Level | Proportion<br>P | Confidence<br>Limit<br>Lower<br>P_L | Confidence<br>Limit<br>Upper<br>P_U |
|-----------------------------|-------------------------|----------------|-----------------------|-----------------|-------------------------------------|-------------------------------------|
| 0-Compliance                | 72                      | 79             | 5.00%                 | 91.14%          | 82.59%                              | 96.36%                              |
| Non-Compliance*             | 7                       | 79             | 5.00%                 | 8.86%           | 3.64%                               | 17.41%                              |
| 1-Material Non-Compliance** | 3                       | 79             | 5.00%                 | 3.80%           | 0.79%                               | 10.70%                              |

Assertion A1b:  
(RECORDS MAINTAINED TO SUPPORT  
DATA)

|              | Observed<br>Occurrences | Sample<br>Size | Significance<br>Level | Proportion<br>P | Confidence<br>Limit<br>Lower<br>P_L | Confidence<br>Limit<br>Upper<br>P_U |
|--------------|-------------------------|----------------|-----------------------|-----------------|-------------------------------------|-------------------------------------|
| 0-Compliance | 67                      | 81             | 5.00%                 | 82.72%          | 72.70%                              | 90.22%                              |

|                             |    |    |       |        |       |        |
|-----------------------------|----|----|-------|--------|-------|--------|
| Non-Compliance*             | 14 | 81 | 5.00% | 17.28% | 9.78% | 27.30% |
| 1-Material Non-Compliance** | 11 | 81 | 5.00% | 13.58% | 6.98% | 23.00% |

Assertion A2:  
(END USER CHARGES DON'T EXCEED  
AMOUNT SET BY 47 C.F.R. § 54.712(a))

|                             | Observed<br>Occurrences | Sample<br>Size | Significance<br>Level | Proportion<br>P | Confidence<br>Limit<br>Lower<br>P_L | Confidence<br>Limit<br>Upper<br>P_U |
|-----------------------------|-------------------------|----------------|-----------------------|-----------------|-------------------------------------|-------------------------------------|
| 0-Compliance                | 36                      | 56             | 5.00%                 | 64.29%          | 50.36%                              | 76.64%                              |
| Non-Compliance*             | 20                      | 56             | 5.00%                 | 35.71%          | 23.36%                              | 49.64%                              |
| 1-Material Non-Compliance** | 16                      | 56             | 5.00%                 | 28.57%          | 17.30%                              | 42.21%                              |

Assertion A3  
(CONTRIBUTOR FAILED TO REPORT OR  
CONTRIBUTE)

|              | Observed<br>Occurrences | Sample<br>Size | Significance<br>Level | Proportion<br>P | Confidence<br>Limit<br>Lower<br>P_L | Confidence<br>Limit<br>Upper<br>P_U |
|--------------|-------------------------|----------------|-----------------------|-----------------|-------------------------------------|-------------------------------------|
| 0-Compliance | 14                      | 15             | 5.00%                 | 93.33%          | 68.05%                              | 99.83%                              |
| 3-Other****  | 1                       | 15             | 5.00%                 | 6.67%           | 0.17%                               | 31.95%                              |

\* Non-Compliance includes both Material Non-Compliance and Non-Material Non-Compliance

\*\* Assumes Material Non-Compliance =1 and Otherwise = 0

Otherwise includes both Compliance and Non-Material Non-compliance

\*\*\*We use inverse beta which is the inverse of the incomplete beta function that approximates the binomial.

\*\*\*\* Other only applied to Assertion A3

## Causes of Non-Compliance

When there was non-compliance on any assertion, data were collected on causes of non-compliance. Table 6 contains all 21 possible causes of non-compliance. Data were collected such that, if an auditor found multiple causes of non-compliance, all causes of non-compliance information would be presented.

**TABLE 6**

- 1-Imprecise FCC Rule/s
- 2-Contradictory FCC Rule/s
- 3-Overly Complex FCC Rules
- 4-Disregarded FCC Rule/s
- 5-Followed State Rule/s (apparent conflict with FCC Rule/s)
- 6-Followed USAC Procedures (apparent conflict with FCC Rule/s)
- 7-Inadequate Documentation Retention
- 8-Inadequate Auditee Processes and/or Policies and Procedures

- 9-Inadequate Systems for Collecting, Reporting, and/or Monitoring Data
- 10-Insufficient Resources/Time to Complete Task/Activity
- 11-Failure to Review/Monitor Work, Material, or Data/Application Submitted by Consultant/Agent
- 12-Applicant/Auditee Weak Internal Controls
- 13-Applicant/Auditee Data Entry Error
- 14-Service Provider Weak Internal Controls
- 15-Service Provider Data Entry Error
- 16-Service Provider Error (other)
- 17-USAC Error
- 18-SOLIX Error
- 19-NECA Error
- 20-Force Majeure (Acts of God and Nature)
- 21-Other

The statistical analysis of cause is contained in Table 7.

**TABLE 7**

| TABLE CONTRIBUTORS: CAUSE                                    |                      | Exact Confidence Interval: Binomial Variable*** |                    |              |                            |                            |
|--|----------------------|---|--------------------|--------------|----------------------------|----------------------------|
| Random Sample Size = 87                                      |                      | 21-Sep-07                                       |                    |              |                            |                            |
| Assertion A1a1:<br>(CONTRIBUTOR ID REPORTED)                 |                      |   |                    |              |                            |                            |
| Non-Compliance: Causes*                                      |                      |   |                    |              |                            |                            |
|  | Observed Occurrences | Sample Size                                     | Significance Level | Proportion P | Confidence Limit Lower P_L | Confidence Limit Upper P_U |
| A1a1_1 (IMPRECISE RULE)                                      | 1                    | 5   | 5.00%              | 20.00%       | 0.51%                      | 71.64%                     |
| A1a1_8 (FAULTY AUDITEE PROCESSES/POLICIES)                   | 5                    | 5   | 5.00%              | 100.00%      |                            |                            |
| A1a1_11 (FAILURE TO REVIEW WORK OF CONSULTANT/AGENT)         | 1                    | 5   | 5.00%              | 20.00%       | 0.51%                      | 71.64%                     |
| A1a1_12 (WEAK AUDITEE INTERNAL CONTROLS)                     | 2                    | 5   | 5.00%              | 40.00%       | 5.27%                      | 85.34%                     |
| Assertion A1a2:<br>(REGULATORY CONTACT INFORMATION PROVIDED) |                      |   |                    |              |                            |                            |
| Non-Compliance: Causes*                                      |                      |   |                    |              |                            |                            |
|  | Observed Occurrences | Sample Size                                     | Significance Level | Proportion P | Confidence Limit Lower P_L | Confidence Limit Upper P_U |
| A1a2_1 (IMPRECISE RULE)                                      | 1                    | 3   | 5.00%              | 33.33%       | 0.84%                      | 90.57%                     |
| A1a2_8 (FAULTY AUDITEE PROCESSES/POLICIES)                   | 3                    | 3   | 5.00%              | 100.00%      |                            |                            |
| A1a2_11 (FAILURE TO REVIEW WORK OF CONSULTANT/AGENT)         | 1                    | 3   | 5.00%              | 33.33%       | 0.84%                      | 90.57%                     |
| A1a2_12 (WEAK AUDITEE INTERNAL CONTROLS)                     | 1                    | 3   | 5.00%              | 33.33%       | 0.84%                      | 90.57%                     |

CONTROLS)

Assertion A1a3:

(AGENT FOR SERVICE OF PROCESS PROVIDED)

| Non-Compliance: Causes*                              | Observed Occurrences | Sample Size | Significance Level | Proportion | Confidence Limit |           |
|--|----------------------|-------------|--------------------|------------|------------------|-----------|
|  |                      |             |                    |            | Lower P_L        | Upper P_U |
| A1a3_1 (IMPRECISE RULE)                              | 1                    | 17          | 5.00%              | 5.88%      | 0.15%            | 28.69%    |
| A1a3_4 (AUDITEE DISREGARDED RULE)                    | 6                    | 17          | 5.00%              | 35.29%     | 14.21%           | 61.67%    |
| A1a3_8 (FAULTY AUDITEE PROCESSES/POLICIES)           | 5                    | 17          | 5.00%              | 29.41%     | 10.31%           | 55.96%    |
| A1a3_9 (INADEQUATE SYSTEMS TO COLLECT& MONITOR DATA) | 1                    | 17          | 5.00%              | 5.88%      | 0.15%            | 28.69%    |
| A1a3_11 (FAILURE TO REVIEW WORK OF CONSULTANT/AGENT) | 2                    | 17          | 5.00%              | 11.76%     | 1.46%            | 36.44%    |
| A1a3_12 (WEAK AUDITEE INTERNAL CONTROLS)             | 7                    | 17          | 5.00%              | 41.18%     | 18.44%           | 67.08%    |
| A1a3_21 (OTHER)                                      | 1                    | 17          | 5.00%              | 5.88%      | 0.15%            | 28.69%    |

Assertion A1a4:

(FCC REGISTRATION PROVIDED)

| Non-Compliance: Causes*                              | Observed Occurrences | Sample Size | Significance Level | Proportion | Confidence Limit |           |
|--|----------------------|-------------|--------------------|------------|------------------|-----------|
|  |                      |             |                    |            | Lower P_L        | Upper P_U |
| A1a4_1 (IMPRECISE RULE)                              | 1                    | 5           | 5.00%              | 20.00%     | 0.51%            | 71.64%    |
| A1a4_8 (FAULTY AUDITEE PROCESSES/POLICIES)           | 5                    | 5           | 5.00%              | 100.00%    |                  |           |
| A1a4_11 (FAILURE TO REVIEW WORK OF CONSULTANT/AGENT) | 2                    | 5           | 5.00%              | 40.00%     | 5.27%            | 85.34%    |
| A1a4_12 (WEAK AUDITEE INTERNAL CONTROLS)             | 3                    | 5           | 5.00%              | 60.00%     | 14.66%           | 94.73%    |

Assertion A1a5a:

(CARRIER'S CARRIER TOTAL REVENUES REPORTED)

| Non-Compliance: Causes*                               | Observed Occurrences | Sample Size | Significance Level | Proportion | Confidence Limit |           |
|---|----------------------|-------------|--------------------|------------|------------------|-----------|
|   |                      |             |                    |            | Lower P_L        | Upper P_U |
| A1a5a_1 (IMPRECISE RULE)                              | 3                    | 41          | 5.00%              | 7.32%      | 1.54%            | 19.92%    |
| A1a5a_3 (OVERLY COMPLEX RULE)                         | 1                    | 41          | 5.00%              | 2.44%      | 0.06%            | 12.86%    |
| A1a5a_4 (AUDITEE DISREGARDED RULE)                    | 4                    | 41          | 5.00%              | 9.76%      | 2.72%            | 23.13%    |
| A1a5a_7 (AUDITEE DOCUMENT RETENTION FAILURE)          | 4                    | 41          | 5.00%              | 9.76%      | 2.72%            | 23.13%    |
| A1a5a_8 (FAULTY AUDITEE PROCESSES/POLICIES)           | 19                   | 41          | 5.00%              | 46.34%     | 30.66%           | 62.58%    |
| A1a5a_9 (INADEQUATE SYSTEMS TO COLLECT& MONITOR DATA) | 4                    | 41          | 5.00%              | 9.76%      | 2.72%            | 23.13%    |

|   |    |    |       |        |        |        |
|---|----|----|-------|--------|--------|--------|
| A1a5a_10 (INSUFFICIENT RESOURCES)                     | 1  | 41 | 5.00% | 2.44%  | 0.06%  | 12.86% |
| A1a5a_11 (FAILURE TO REVIEW WORK OF CONSULTANT/AGENT) | 14 | 41 | 5.00% | 34.15% | 20.08% | 50.59% |
| A1a5a_12 (WEAK AUDITEE INTERNAL CONTROLS)             | 21 | 41 | 5.00% | 51.22% | 35.13% | 67.12% |
| A1a5a_13 (AUDITEE DATA ERROR)                         | 10 | 41 | 5.00% | 24.39% | 12.36% | 40.30% |
| A1a5a_14 (WEAK SERVICE PROVIDER INTERNAL CONTROLS)    | 5  | 41 | 5.00% | 12.20% | 4.08%  | 26.20% |
| A1a5a_16 (SERVICE PROVIDER ERROR-OTHER)               | 5  | 41 | 5.00% | 12.20% | 4.08%  | 26.20% |
| A1a5a_21 (OTHER)                                      | 1  | 41 | 5.00% | 2.44%  | 0.06%  | 12.86% |

Assertion A1a5b:

(CARRIER'S CARRIER INTERSTATE REVENUES REPORTED)

Non-Compliance: Causes\*

|  | Observed Occurrences | Sample Size | Significance Level | Proportion P | Confidence Limit Lower P_L | Confidence Limit Upper P_U |
|--|----------------------|-------------|--------------------|--------------|----------------------------|----------------------------|
| A1a5b_1 (IMPRECISE RULES)                              | 4                    | 39          | 5.00%              | 10.26%       | 2.87%                      | 24.22%                     |
| A1a5b_2 (CONTRADICTORY RULES)                          | 2                    | 39          | 5.00%              | 5.13%        | 0.63%                      | 17.32%                     |
| A1a5b_3 (OVERLY COMPLEX RULES)                         | 1                    | 39          | 5.00%              | 2.56%        | 0.06%                      | 13.48%                     |
| A1a5b_4 (AUDITEE DISREGARDED RULES)                    | 4                    | 39          | 5.00%              | 10.26%       | 2.87%                      | 24.22%                     |
| A1a5b_7 (AUDITEE DOCUMENT RETENTION FAILURE)           | 6                    | 39          | 5.00%              | 15.38%       | 5.86%                      | 30.53%                     |
| A1a5b_8 (WEAK AUDITEE PROCESSES/POLICIES)              | 22                   | 39          | 5.00%              | 56.41%       | 39.62%                     | 72.19%                     |
| A1a5b_9 (INADEQUATE SYSTEMS TO COLLECT & MONITOR DATA) | 7                    | 39          | 5.00%              | 17.95%       | 7.54%                      | 33.53%                     |
| A1a5b_10 (INSUFFICIENT RESOURCES)                      | 1                    | 39          | 5.00%              | 2.56%        | 0.06%                      | 13.48%                     |
| A1a5b_11 (FAILURE TO REVIEW WORK OF CONSULTANT/AGENT)  | 13                   | 39          | 5.00%              | 33.33%       | 19.09%                     | 50.22%                     |
| A1a5b_12 (WEAK AUDITEE INTERNAL CONTROLS)              | 19                   | 39          | 5.00%              | 48.72%       | 32.42%                     | 65.22%                     |
| A1a5b_13 (AUDITEE DATA ENTRY ERROR)                    | 6                    | 39          | 5.00%              | 15.38%       | 5.86%                      | 30.53%                     |
| A1a5b_14 (WEAK SERVICE PROVIDER INTERNAL CONTROLS)     | 4                    | 39          | 5.00%              | 10.26%       | 2.87%                      | 24.22%                     |
| A1a5b_16 (SERVICE PROVIDER ERROR-OTHER)                | 4                    | 39          | 5.00%              | 10.26%       | 2.87%                      | 24.22%                     |
| A1a5b_21 (OTHER)                                       | 2                    | 39          | 5.00%              | 5.13%        | 0.63%                      | 17.32%                     |

Assertion A1a5c:

(CARRIER'S CARRIER GOOD FAITH INTERSTATE ESTIMATE REPORTED)

Non-Compliance: Causes\*

|   | Observed Occurrences | Sample Size | Significance Level | Proportion P | Confidence Limit Lower P_L | Confidence Limit Upper P_U |
|---|----------------------|-------------|--------------------|--------------|----------------------------|----------------------------|
| A1a5c_1 (IMPRECISE RULE)                    | 3                    | 12          | 5.00%              | 25.00%       | 5.49%                      | 57.19%                     |
| A1a5c_4 (AUDITEE DISREGARDED RULE)          | 3                    | 12          | 5.00%              | 25.00%       | 5.49%                      | 57.19%                     |
| A1a5c_8 (FAULTY AUDITEE PROCESSES/POLICIES) | 6                    | 12          | 5.00%              | 50.00%       | 21.09%                     | 78.91%                     |

|  |   |    |       |        |        |        |
|--|---|----|-------|--------|--------|--------|
| A1a5c_9 (INADEQUATE SYSTEMS TO COLLECT & MONITOR DATA) | 2 | 12 | 5.00% | 16.67% | 2.09%  | 48.41% |
| A1a5c_11 (FAILURE TO MONITOR WORK OF CONSULTANT/AGENT) | 2 | 12 | 5.00% | 16.67% | 2.09%  | 48.41% |
| A1a5c_12 (WEAK AUDITEE INTERNAL CONTROLS)              | 5 | 12 | 5.00% | 41.67% | 15.17% | 72.33% |
| A1a5c_13 (AUDITEE DATE ENTRY ERROR)                    | 1 | 12 | 5.00% | 8.33%  | 0.21%  | 38.48% |
| A1a5c_14 (WEAK SERVICE PROVIDER INTERNAL CONTROLS)     | 1 | 12 | 5.00% | 8.33%  | 0.21%  | 38.48% |

Assertion A1a6a:  
(END-USER & NON-TELECOM TOTAL REVENUES REPORTED)

| Non-Compliance: Causes*                                | Observed    | Sample | Significance | Proportion | Confidence | Confidence |
|--|-------------|--------|--------------|------------|------------|------------|
|  | Occurrences | Size   |              |            | Limit      | Limit      |
|  | X           | N      | Level        | P          | P_L        | P_U        |
| A1a6a_1 (IMPRECISE RULES)                              | 5           | 62     | 5.00%        | 8.06%      | 2.67%      | 17.83%     |
| A1a6a_2 (CONTRADICTORY RULES)                          | 1           | 62     | 5.00%        | 1.61%      | 0.04%      | 8.66%      |
| A1a6a_4 (AUDITEE DISREGARDED RULES)                    | 8           | 62     | 5.00%        | 12.90%     | 5.74%      | 23.85%     |
| A1a6a_5 (FOLLOWED APPARENTLY CONFLICTING STATE RULE)   | 2           | 62     | 5.00%        | 3.23%      | 0.39%      | 11.17%     |
| A1a6a_7 (AUDITEE DOCUMENT RETENTION FAILURE)           | 3           | 62     | 5.00%        | 4.84%      | 1.01%      | 13.50%     |
| A1a6a_8 (WEAK AUDITEE PROCESSES/POLICIES)              | 31          | 62     | 5.00%        | 50.00%     | 37.02%     | 62.98%     |
| A1a6a_9 (SYSTEMS INADEQUATE TO COLLECT & MONITOR DATA) | 11          | 62     | 5.00%        | 17.74%     | 9.20%      | 29.53%     |
| A1a6a_10 (INSUFFICIENT RESOURCES)                      | 1           | 62     | 5.00%        | 1.61%      | 0.04%      | 8.66%      |
| A1a6a_11 (FAILURE TO MONITOR WORK OF CONSULTANT/AGENT) | 14          | 62     | 5.00%        | 22.58%     | 12.93%     | 34.97%     |
| A1a6a_12 (WEAK AUDITEE INTERNAL CONTROLS)              | 29          | 62     | 5.00%        | 46.77%     | 33.98%     | 59.88%     |
| A1a6a_13 (AUDITEE DATA ENTRY ERROR)                    | 12          | 62     | 5.00%        | 19.35%     | 10.42%     | 31.37%     |
| A1a6a_14 (WEAK SERVICE PROVIDER INTERNAL CONTROLS)     | 5           | 62     | 5.00%        | 8.06%      | 2.67%      | 17.83%     |
| A1a6a_16 (SERVICE PROVIDER ERROR-OTHER)                | 6           | 62     | 5.00%        | 9.68%      | 3.63%      | 19.88%     |

Assertion A1a6b:  
(END-USER & NON-TELECOM INTERSTATE REVENUES REPORTED)

| Non-Compliance: Causes*             | Observed    | Sample | Significance | Proportion | Confidence | Confidence |
|-------------------------------------|-------------|--------|--------------|------------|------------|------------|
|                                     | Occurrences | Size   |              |            | Limit      | Limit      |
|                                     | X           | N      | Level        | P          | P_L        | P_U        |
| A1a6b_1 (IMPRECISE RULE)            | 4           | 59     | 5.00%        | 6.78%      | 1.88%      | 16.46%     |
| A1a6b_2 (CONTRADICTORY RULES)       | 3           | 59     | 5.00%        | 5.08%      | 1.06%      | 14.15%     |
| A1a6b_4 (AUDITEE DISREGARDED RULES) | 7           | 59     | 5.00%        | 11.86%     | 4.91%      | 22.93%     |
| A1a6b_5 (FOLLOWED APPARENTLY        | 2           | 59     | 5.00%        | 3.39%      | 0.41%      | 11.71%     |

|  |    |    |       |        |        |        |  |
|--|----|----|-------|--------|--------|--------|--|
| CONFLICTING STATE RULE)                                |    |    |       |        |        |        |  |
| A1a6b_7 (AUDITEE DOCUMENT RETENTION FAILURE)           | 5  | 59 | 5.00% | 8.47%  | 2.81%  | 18.68% |  |
| A1a6b_8 (WEAK AUDITEE PROCESSES/POLICIES)              | 33 | 59 | 5.00% | 55.93% | 42.40% | 68.84% |  |
| A1a6b_9 (INADEQUATE SYSTEMS TO COLLECT & MONITOR DATA) | 14 | 59 | 5.00% | 23.73% | 13.62% | 36.59% |  |
| A1a6b_10 (INSUFFICIENT RESOURCES)                      | 1  | 59 | 5.00% | 1.69%  | 0.04%  | 9.09%  |  |
| A1a6b_11 (FAILURE TO MONITOR WORK OF CONSULTANT/AGENT) | 13 | 59 | 5.00% | 22.03% | 12.29% | 34.73% |  |
| A1a6b_12 (WEAK AUDITEE INTERNAL CONTROLS)              | 26 | 59 | 5.00% | 44.07% | 31.16% | 57.60% |  |
| A1a6b_13 (AUDITEE DATA ENTRY ERROR)                    | 12 | 59 | 5.00% | 20.34% | 10.98% | 32.83% |  |
| A1a6b_14 (WEAK SERVICE PROVIDER INTERNAL CONTROLS)     | 4  | 59 | 5.00% | 6.78%  | 1.88%  | 16.46% |  |
| A1a6b_16 (SERVICE PROVIDER ERROR-OTHER)                | 4  | 59 | 5.00% | 6.78%  | 1.88%  | 16.46% |  |
| A1a6b_21 (OTHER)                                       | 1  | 59 | 5.00% | 1.69%  | 0.04%  | 9.09%  |  |

Assertion A1a6c:

| (END-USER & NON-TELECOM GOOD FAITH ESTIMATES REPORTED)        | Observed Occurrences | Sample Size | Significance Level | Proportion P | Confidence Limit Lower P_L | Confidence Limit Upper P_U |
|---|----------------------|-------------|--------------------|--------------|----------------------------|----------------------------|
| Non-Compliance: Causes*                                       | X                    | N           |                    |              |                            |                            |
| A1a6c_1 (IMPRECISE RULE)                                      | 3                    | 15          | 5.00%              | 20.00%       | 4.33%                      | 48.09%                     |
| A1a6c_4 (AUDITEE DISREGARDED RULES)                           | 3                    | 15          | 5.00%              | 20.00%       | 4.33%                      | 48.09%                     |
| A1a6c_7 (AUDITEE DOCUMENT RETENTION FAILURE)                  | 1                    | 15          | 5.00%              | 6.67%        | 0.17%                      | 31.95%                     |
| A1a6c_8 (WEAK AUDITEE PROCESSES/POLICIES)                     | 7                    | 15          | 5.00%              | 46.67%       | 21.27%                     | 73.41%                     |
| A1a6c_9 (INADEQUATE SYSTEMS FOR COLLECTING & MONITORING DATA) | 3                    | 15          | 5.00%              | 20.00%       | 4.33%                      | 48.09%                     |
| A1a6c_11 (FAILURE TO MONITOR WORK OF CONSULTANT/AGENT)        | 2                    | 15          | 5.00%              | 13.33%       | 1.66%                      | 40.46%                     |
| A1a6c_12 (WEAK AUDITEE INTERNAL CONTROLS)                     | 7                    | 15          | 5.00%              | 46.67%       | 21.27%                     | 73.41%                     |
| A1a6c_13 (AUDITEE DATE ENTRY ERROR)                           | 2                    | 15          | 5.00%              | 13.33%       | 1.66%                      | 40.46%                     |
| A1a6c_16 (SERVICE PROVIDER DATA ENTRY ERROR)                  | 1                    | 15          | 5.00%              | 6.67%        | 0.17%                      | 31.95%                     |

Assertion A1a7: Block 4-B –

| (TOTAL REVENUE & UNCOLLECTIBLE REVENUE REPORTED) | Observed Occurrences | Sample Size | Significance Level | Proportion P | Confidence Limit Lower P_L | Confidence Limit Upper P_U |
|--|----------------------|-------------|--------------------|--------------|----------------------------|----------------------------|
| Non-Compliance: Causes*                          | X                    | N           |                    |              |                            |                            |
| A1a7_1 (IMPRECISE RULE)                          | 6                    | 56          | 5.00%              | 10.71%       | 4.03%                      | 21.88%                     |
| A1a7_2 (CONTRADICTORY RULES)                     | 1                    | 56          | 5.00%              | 1.79%        | 0.05%                      | 9.55%                      |
| A1a7_3 (OVERLY COMPLEX RULES)                    | 1                    | 56          | 5.00%              | 1.79%        | 0.05%                      | 9.55%                      |
| A1a7_4 (AUDITEE DISREGARDED                      | 6                    | 56          | 5.00%              | 10.71%       | 4.03%                      | 21.88%                     |

RULES)

|  |    |    |       |        |        |        |
|--|----|----|-------|--------|--------|--------|
| A1a7_5 (FOLLOWED APPARENTLY CONFLICTING STATE RULE)          | 1  | 56 | 5.00% | 1.79%  | 0.05%  | 9.55%  |
| A1a7_7 (AUDITEE DOCUMENT RETENTION FAILURE)                  | 3  | 56 | 5.00% | 5.36%  | 1.12%  | 14.87% |
| A1a7_8 (WEAK AUDITEE PROCESSES/POLICIES)                     | 28 | 56 | 5.00% | 50.00% | 36.34% | 63.66% |
| A1a7_9 (INADEQUATE SYSTEMS FOR COLLECTING & MONITORING DATA) | 7  | 56 | 5.00% | 12.50% | 5.18%  | 24.07% |
| A1a7_10 (INSUFFICIENT RESOURCES)                             | 1  | 56 | 5.00% | 1.79%  | 0.05%  | 9.55%  |
| A1a7_11 (FAILURE TO MONITOR WORK OF CONSULTANTS/AGENTS)      | 13 | 56 | 5.00% | 23.21% | 12.98% | 36.42% |
| A1a7_12 (WEAK AUDITEE INTERNAL CONTROLS)                     | 22 | 56 | 5.00% | 39.29% | 26.50% | 53.25% |
| A1a7_13 (AUDITEE DATA ERROR)                                 | 15 | 56 | 5.00% | 26.79% | 15.83% | 40.30% |
| A1a7_14 (WEAK SERVICE PROVIDER INTERNAL CONTROLS)            | 4  | 56 | 5.00% | 7.14%  | 1.98%  | 17.29% |
| A1a7_15 (SERVICE PROVIDER DATA ENTRY ERROR)                  | 1  | 56 | 5.00% | 1.79%  | 0.05%  | 9.55%  |
| A1a7_16 (SERVICE PROVIDER ERROR-OTHER)                       | 5  | 56 | 5.00% | 8.93%  | 2.96%  | 19.62% |
| A1a7_21 (OTHER)  | 1  | 56 | 5.00% | 1.79%  | 0.05%  | 9.55%  |

Assertion A1a8a: Block 5 –  
(ADDITIONAL REVENUE REPORTED)

| Lines 503-510  | Observed    | Sample |              |            | Confidence | Confidence |
|--|-------------|--------|--------------|------------|------------|------------|
| Non-Compliance: Causes*                                  | Occurrences | Size   | Significance | Proportion | Lower      | Upper      |
|  | X           | N      | Level        | P          | P_L        | P_U        |
| A1a8a_1 (IMPRECISE RULE)                                 | 1           | 6      | 5.00%        | 16.67%     | 0.42%      | 64.12%     |
| A1a8a_7 (AUDITEE DOCUMENT RETENTION FAILURE)             | 1           | 6      | 5.00%        | 16.67%     | 0.42%      | 64.12%     |
| A1a8a_8 (WEAK AUDITEE PROCESSES/POLICIES)                | 4           | 6      | 5.00%        | 66.67%     | 22.28%     | 95.67%     |
| A1a8a_9 (INADEQUATE SYSTEMS TO COLLECT & MONITOR DATA)   | 1           | 6      | 5.00%        | 16.67%     | 0.42%      | 64.12%     |
| A1a8a_11 (FAILURE TO MONITOR WORK OF CONSULTANTS/AGENTS) | 1           | 6      | 5.00%        | 16.67%     | 0.42%      | 64.12%     |
| A1a8a_12 (WEAK AUDITEE INTERNAL CONTROLS)                | 3           | 6      | 5.00%        | 50.00%     | 11.81%     | 88.19%     |
| A1a8a_13 (AUDITEE DATA ENTRY ERROR)                      | 1           | 6      | 5.00%        | 16.67%     | 0.42%      | 64.12%     |

Assertion A1a8b: Block 5  
(ADDITIONAL REVENUE REPORTED)

| Lines 511  | Observed    | Sample |              |            | Confidence | Confidence |
|--|-------------|--------|--------------|------------|------------|------------|
| Non-Compliance: Causes*                                | Occurrences | Size   | Significance | Proportion | Lower      | Upper      |
|  | X           | N      | Level        | P          | P_L        | P_U        |
| A1a8b_1 (IMPRECISE RULE)                               | 1           | 5      | 5.00%        | 20.00%     | 0.51%      | 71.64%     |
| A1a8b_8 (WEAK AUDITEE PROCESSES/POLICIES)              | 4           | 5      | 5.00%        | 80.00%     | 28.36%     | 99.49%     |
| A1a8b_9 (INADEQUATE SYSTEMS TO COLLECT & MONITOR DATA) | 1           | 5      | 5.00%        | 20.00%     | 0.51%      | 71.64%     |

|  |   |   |       |        |        |        |
|--|---|---|-------|--------|--------|--------|
| A1a8b_11 (FAILURE TO MONITOR WORK OF CONSULTANTS/AGENTS) | 1 | 5 | 5.00% | 20.00% | 0.51%  | 71.64% |
| A1a8b_12 (WEAK AUDITEE INTERNAL CONTROLS)                | 3 | 5 | 5.00% | 60.00% | 14.66% | 94.73% |

Assertion A1a9: Block 6  
(CERTIFICATION)

| Lines 601 to 612<br>Non-Compliance: Causes*             | Observed Occurrences | Sample Size | Significance Level | Proportion P | Confidence Limit Lower P_L | Confidence Limit Upper P_U |
|---|----------------------|-------------|--------------------|--------------|----------------------------|----------------------------|
| A1a9_1 (IMPRCISE RULE)                                  | 1                    | 7           | 5.00%              | 14.29%       | 0.36%                      | 57.87%                     |
| A1a9_8 (WEAK AUDITEE PROCESSES/POLICIES)                | 5                    | 7           | 5.00%              | 71.43%       | 29.04%                     | 96.33%                     |
| A1a9_11 (FAILURE TO MONITOR WORK OF CONSULTANTS/AGENTS) | 2                    | 7           | 5.00%              | 28.57%       | 3.67%                      | 70.96%                     |
| A1a9_12 (WEAK AUDITEE INTERNAL CONTROLS)                | 3                    | 7           | 5.00%              | 42.86%       | 9.90%                      | 81.59%                     |
| A1a9_13 (AUDITEE DATA ENTRY ERROR)                      | 2                    | 7           | 5.00%              | 28.57%       | 3.67%                      | 70.96%                     |

Assertion A1b:  
(MAINTAINED RECORDS)

| Documentation<br>Non-Compliance: Causes*             | Observed Occurrences | Sample Size | Significance Level | Proportion P | Confidence Limit Lower P_L | Confidence Limit Upper P_U |
|--|----------------------|-------------|--------------------|--------------|----------------------------|----------------------------|
| A1b_1 (IMPRECISE RULE)                               | 1                    | 14          | 5.00%              | 7.14%        | 0.18%                      | 33.87%                     |
| A1b_7 (AUDITEE DOCUMENT RETENTION FAILURE)           | 12                   | 14          | 5.00%              | 85.71%       | 57.19%                     | 98.22%                     |
| A1b_8 (WEAK AUDITEE PROCESSES/POLICIES)              | 8                    | 14          | 5.00%              | 57.14%       | 28.86%                     | 82.34%                     |
| A1b_9 (INADEQUATE SYSTEMS TO COLLECT & MONITOR DATA) | 6                    | 14          | 5.00%              | 42.86%       | 17.66%                     | 71.14%                     |
| A1b_12 (WEAK AUDITEE INTERNAL CONTROLS)              | 5                    | 14          | 5.00%              | 35.71%       | 12.76%                     | 64.86%                     |
| A1b_16 (SERVICE PROVIDER ERROR-OTHER)                | 1                    | 14          | 5.00%              | 7.14%        | 0.18%                      | 33.87%                     |

Assertion A2:  
(END USER CHARGES DON'T EXCEED AMOUNT SET BY 47 C.F.R. § 54.712(a))

| Non-Compliance: Causes*                             | Observed Occurrences | Sample Size | Significance Level | Proportion P | Confidence Limit Lower P_L | Confidence Limit Upper P_U |
|---|----------------------|-------------|--------------------|--------------|----------------------------|----------------------------|
| A2_1 (IMPRECISE RULE)                               | 1                    | 20          | 5.00%              | 5.00%        | 0.13%                      | 24.87%                     |
| A2_4 (AUDITEE DISREGARDED RULE)                     | 2                    | 20          | 5.00%              | 10.00%       | 1.23%                      | 31.70%                     |
| A2_7 (AUDITEE DOCUMENT RETENTION FAILURE)           | 2                    | 20          | 5.00%              | 10.00%       | 1.23%                      | 31.70%                     |
| A2_8 (WEAK AUDITEE PROCESSES/POLICIES)              | 7                    | 20          | 5.00%              | 35.00%       | 15.39%                     | 59.22%                     |
| A2_9 (INADEQUATE SYSTEMS TO COLLECT & MONITOR DATA) | 2                    | 20          | 5.00%              | 10.00%       | 1.23%                      | 31.70%                     |

|   |    |    |       |        |        |        |
|---|----|----|-------|--------|--------|--------|
| A2_11 (FAILURE TO MONITOR WORK OF CONSULTANTS/AGENTS) | 2  | 20 | 5.00% | 10.00% | 1.23%  | 31.70% |
| A2_12 (WEAK AUDITEE INTERNAL CONTROLS)                | 13 | 20 | 5.00% | 65.00% | 40.78% | 84.61% |
| A2_14 (WEAK SERVICE PROVIDER INTERNAL CONTROLS)       | 1  | 20 | 5.00% | 5.00%  | 0.13%  | 24.87% |
| A2_15 (SERVICE PROVIDER DATA ENTRY ERROR)             | 1  | 20 | 5.00% | 5.00%  | 0.13%  | 24.87% |
| A2_21 (OTHER)   | 2  | 20 | 5.00% | 10.00% | 1.23%  | 31.70% |

Assertion A3:

(CONTRIBUTOR FAILED TO REPORT OR CONTRIBUTE)

| Non-Compliance: Causes* | Observed Occurrences | Sample Size | Significance Level | Proportion | Confidence Limit |       |
|-------------------------|----------------------|-------------|--------------------|------------|------------------|-------|
|                         |                      |             |                    |            | Lower            | Upper |
|                         | X                    | N           |                    | P          | P_L              | P_U   |
| A3_21 (OTHER)           | 1                    | 1           | 5.00%              | 100.00%    |                  |       |

\* Non-Compliance includes both Material Non-Compliance and Non-Material Non-Compliance

\*\*The assertion number followed by the underscore and number indicates the cause of non-compliance.

For example A2\_7 means non-compliance on Assertion A2 and a cause was 7 which is Inadequate Documentation Retention.

\*\*\*On any assertion with non-compliance, the percentages associated with causes do not sum to 100 because data were collected such that multiple causes could be found and entered by an auditor.

\*\*\*\*We use inverse beta which is the inverse of the incomplete beta function that approximates the binomial.

## Analysis/Conclusion

We estimate that, if the contributors were audited, 6.90 percent of audits would consist of disclaimed opinions. That is, in 6.90 percent of the population, no opinion could be provided as to whether contributors were in compliance with FCC Rules or not. The fundamental cause of a disclaimed opinion by an auditor was insufficient information or documentation to render an opinion on a contributor. We estimate that the percentage of the population with adverse opinions is 19.54 percent, and estimate that 57.47 percent of the population had qualified opinions. The share of the population with unqualified opinions is estimated to be 16.09 percent.

Where auditors could render opinions on compliance/non-compliance with FCC rules, non-compliance was found on every FCC rule and regulation. Except for one instance, material-non-compliances were found with regard to FCC rules and regulations. In fact, material non-compliance rates exceed 50 percent for several FCC Rules. The causes of non-compliance are many. Significant causes of non-compliance are: Inadequate Auditee Processes and/or Policies and Procedures; Failure to Review/Monitor Work, Material, or Data/Application Submitted by Consultant/Agent; and Applicant/Auditee Weak Internal Controls.

Under the IPIA, estimates of both the erroneous payment rate and amount of erroneous payment are intended to guide the Commission in assessing risk associated with all USF Programs. Under IPIA standards, a program is at risk if the erroneous payment rate exceeds 2.5 percent and the amount of erroneous payment is greater than \$10 million. To assess compliance and risk, a simple random sample of auditees, i.e., contributors (filers of FCC Form 499-A) was drawn and compliance attestation examinations/audits were completed. The statistical results from a simple random sample of 87 auditees, *suggest that the Contribution Component of the Universal Service Mechanism is at risk*, and there are significant problems in the collection of contributions. The contribution estimated error rate is 5.50 percent and the estimated amount of erroneous contribution \$385 million.

In summary, there are significant problems in the contribution component of USF and, given the existence of disclaimed audit pinions, non-compliance may be more widespread than the results suggest. Under the IPIA, this component should be considered “at risk.”

## Appendix 1

### Calculation of Erroneous Contribution Amount with 5.50% Erroneous Contribution Rate

|  | 2005<br>Quarter<br>1       | 2005<br>Quarter<br>2 | 2005<br>Quarter<br>3 | 2005<br>Quarter<br>4 | Average<br>for year |
|--|----------------------------|----------------------|----------------------|----------------------|---------------------|
| Contribution Factor 1/   | 0.107                      | 0.111                | 0.102                | 0.102                | 0.105500            |
| Circularity Factor 1/  | 0.095929                   | 0.103230             | 0.091379             | 0.095076             | 0.096404            |
| <br>   |                            |                      |                      |                      |                     |
| USF Contribution Base Revenues<br>(Sum of audited totals from Line 423 d<br>and 423 e) | \$77.266                   |                      |                      |                      |                     |
| <br>   |                            |                      |                      |                      |                     |
| Revenue excluded either because of the<br>LIRE or international-only exemptions 2/     | \$3.742                    |                      |                      |                      |                     |
| Revenue excluded from de minimis filers 2/<br>Billable base                            | <u>\$0.054</u><br>\$73.470 |                      |                      |                      |                     |
| <br>   |                            |                      |                      |                      |                     |
| Net contribution base 3/   | \$66.388                   |                      |                      |                      |                     |
| <br>   |                            |                      |                      |                      |                     |
| Normalized contributions due for 2005  | \$7.004                    |                      |                      |                      |                     |
| <br>   |                            |                      |                      |                      |                     |
| error rate   | 5.50%                      |                      |                      |                      |                     |
| <br>   |                            |                      |                      |                      |                     |
| Estimated sum of erroneous billing amounts   | \$0.385                    |                      |                      |                      |                     |

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1/ Quarterly figures taken from Commission Public Notices DA 04-3902, DA 05-648, DA 05-1664, and DA 05-2454.

2/ Telecommunications Industry Revenues -- 2005 (June 2007) Table 4.

## **Appendix 2**

### **Analysis of USAC's Pre-Audit Billed and Post-Audit Change in Billed Contribution**

#### **Background**

In order to estimate a more accurate IPIA erroneous contribution rate, both pre-audit billed contribution amounts and post-audit erroneous contribution data are required for each telecommunications carrier in the sample. Auditors did not produce data on pre-audit billed contribution amounts nor did they produce data on post-audit erroneous billed amounts. The extracted data from the Contributor audits consist of revenues, data on compliance, and data on causes of non-compliance.

#### **Data**

On September 18, 2007, USAC provided the OIG estimates of both pre-audit billed contribution amounts and post-audit erroneous contribution amounts for auditees in the random sample. The methodology used to construct these data is un-audited and is not presented with the data. There are, however, calculations associated with these data that require explanation additional auditing for confirmation. For example, the audit extract data does not contain revenues on disclaimed opinions. USAC generated, however, pre-audit billed amounts and post-audit erroneous payment amounts for two disclaimed opinions. In one case USAC estimates that an auditee should receive a refund even though no audited revenues are reported for that firm. We find this data less reliable than data provided by auditors. Using USAC's September 18, 2007 data and removing disclaimed, as well as inappropriate audit substitutes from that data, we estimate an erroneous contribution rate.

#### **Estimation Results**

The numerator of the ratio estimator depends on USAC's post-audit change in billed contribution amounts. The denominator depends on the pre-audit billed contribution amounts. Using USAC's data, the estimated erroneous contribution rate is 6.05 percent. Because USAC does not provide pre-audit billed contribution amounts for the population, the erroneous contribution amount is approximately \$424 million. (See Appendix 2 for details.)

The lack of data on pre-audit bill amounts for the population does not permit the calculation of the mean of pre-audit billed amount for the population. This implies that the estimated variance of this ratio estimate of 6.05 percent will not be informed by the mean of the pre-audit billed amounts. This results in a margin of error of 0.080870852.

The erroneous contribution amount is calculated in TABLE A2-1 below.

TABLE A2-1

**Calculation of Erroneous Contribution Amount  
Contribution Rate of 6.05%**

|  | 2005<br>Quarter<br>1       | 2005<br>Quarter<br>2 | 2005<br>Quarter<br>3 | 2005<br>Quarter<br>4 | Average<br>for year |
|--|----------------------------|----------------------|----------------------|----------------------|---------------------|
| Contribution Factor 1/<br>Circularity Factor 1/  | 0.107                      | 0.111                | 0.102                | 0.102                | 0.105500            |
|  | 0.095929                   | 0.103230             | 0.091379             | 0.095076             | 0.096404            |
| USF Contribution Base Revenues<br>(Sum of audited totals from Line 423 d<br>and 423 e) | \$77.266                   |                      |                      |                      |                     |
| Revenue excluded either because of the<br>LIRE or international-only exemptions 2/     | \$3.742                    |                      |                      |                      |                     |
| Revenue excluded from de minimis filers 2/<br>Billable base                            | <u>\$0.054</u><br>\$73.470 |                      |                      |                      |                     |
| Net contribution base 3/   | \$66.388                   |                      |                      |                      |                     |
| Normalized contributions due for 2005  | \$7.004                    |                      |                      |                      |                     |
| error rate   | 6.05%                      |                      |                      |                      |                     |
| Estimated sum of erroneous billing amounts   | \$0.424                    |                      |                      |                      |                     |

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1/ Quarterly figures taken from Commission Public Notices: DA-04-3902; DA 05-648; DA 05-1664; and DA 05-2454

2/ Telecommunications Industry Revenues -- 2005, June 2007,  
Table 4.

3/ Billable base Less Circularity adjustment