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September 11, 2015

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street S.W.
Washington, DC 20554

Lynne Hewitt Engledow
Pricing Policy Division
Federal Communications Commission
445 12th Street S.W.
Washington, DC 20554

Accepted / Filed

SEP 11 2015

Federal Communications Commission
Office of the Secretary

Re: Connect America Fund Docket No. 10-90, *et. al.*

Dear Ms. Dortch and Ms. Engledow:

The Federal Communications Commission (Commission) staff has requested the National Exchange Carrier Association, Inc. (NECA) file preliminary data and results for a potential “FCC bifurcated concept” for rate-of-return universal services fund (USF) support as discussed in an August 6, 2015 meeting with the Commission.¹ It should be noted that this data is provided to aid in the identification and discussion of issues that may require further examination and does not represent any position on this concept by NECA. This information is being filed pursuant to the *Third Protective Order* issued in this proceeding.²

¹ See Letter from B. Lynn Follansbee, United States Telecom Association to Marlene H. Dortch, Secretary – Federal Communications Commission, Connect America Fund Docket No. 10-90 (filed August 10, 2015).

² *Connect America Fund*, WC Docket No. 10-90, *et. al.*, Third Protective Order, 27 FCC Rcd. 10276 (2012) (*Third Protective Order*). The public version of the filing has been redacted in its entirety because the co-dependent nature of the public and confidential data makes it possible to derive one given the other.

REDACTED – FOR PUBLIC INSPECTION

Summary information supplied by NECA is contained in Attachment I. Supporting data used in producing the summary information in Attachment I is contained on a CD-ROM accompanying this letter.

NECA seeks confidential treatment of the information provided on the CD-ROM under the *Third Protective Order*. Notwithstanding the *Third Protective Order*, the information provided on the CD-ROM is entitled to confidential, non-public treatment under the Freedom of Information Act (FOIA) and related provisions of the Commission's rules.³ The information satisfies the requirement of FOIA Exemption 4 (trade secrets or commercial/financial information).

NECA submits the following information pursuant to section 0.459 in support of its request for confidential treatment of the data on the CD-ROM.

- Identification of the specific information for which confidential treatment is sought:

NECA seeks confidential treatment for the study area specific information on the CD-ROM, which contains confidential and proprietary information related to total company and interstate revenue, demand, expense and investment for rate of return carriers.

- Identification of the Commission proceeding in which the information was submitted or a description of the circumstances giving rise to the submission:

This data is submitted in response to a Commission staff request for analysis related to an FCC bifurcated concept for rate of return USF support.

- Explanation of the degree to which the information is commercial or financial, or contains a trade secret or is privileged:

The information on the CD-ROM contains sensitive study area specific information. At the study area level, the data contains information that is granular and highly confidential.

The carrier data included on the CD-ROM should be treated as confidential trade secret information. NECA would not agree to submit the data in response to the Commission staff's request without assurances that the information will be kept confidential. It would be highly inappropriate for the data to be disclosed to the public or third parties.

- Explanation of the degree to which the information concerns a service that is subject to competition:

³ 47 C.F.R. §§ 0.457 and 0.459; 5 U.S.C. § 552, et. seq. Section 0.457(d)(iii) specifically identifies information submitted in connection with audits, investigations, and examination of records pursuant to 47 U.S.C. 220 as material that has been accepted by the Commission on a confidential basis pursuant to 5 U.S.C. 552(b)(4).

REDACTED – FOR PUBLIC INSPECTION

Rural telephone service has historically lent itself to “cherry picking” by competitors that choose to serve only the low cost areas within a study area. Detailed information about revenues and expenses may help prospective competitors to gain insight to incumbent LEC (ILEC) market strategies and gain competitive advantage.

- Identification of any measures taken by the submitting party to prevent unauthorized disclosure:

The information provided in the attached CD-ROM includes data that is made available only to NECA representatives on a need to know basis. Any public information is only made available on an aggregate basis.

- Identification of whether the information is available to the public and the extent of any previous disclosure of the information to third parties:

The calculations in the Excel spreadsheets on the CD-ROM are not publicly available.

- Justification of the period during which the submitting party asserts that material should not be available for public disclosure:

NECA requests that all of the data provided on the CD-ROM be treated as confidential indefinitely. Because of the sensitive nature of the data, it would not be appropriate for public disclosure at any time in the foreseeable future.

- Any other information that the party seeking confidential treatment believes may be useful in assessing whether its request for confidentiality should be granted:

By addressing the data request to NECA, the Commission avoided the burden of seeking out the data for 1000 plus rate of return carrier study areas. However, the Commission should take care to not deprive those ILECs of the opportunity to speak for themselves in the event of a FOIA request for access to data. NECA requests that the Commission notify carriers of any FOIA request and allow them to be given a reasonable opportunity to file detailed information supporting continued confidential treatment of their respective data.

Accordingly, NECA requests confidential treatment of the data provided on the attached CD-ROM pursuant to section 0.457 and 0.459 of the Commission’s rules and paragraph 4 of the Protective Order. Pursuant to the Protective Order, NECA has marked the Excel spreadsheets on the CD-ROM and each page of the non-redacted version of this filing as follows:

CONFIDENTIAL INFORMATION - SUBJECT TO PROTECTIVE ORDER IN WC DOCKET NOS 10-90, 07-135, 05-337, 03-109, GN DOCKET NO. 09-51, CC DOCKET NOS. 01-92, 96-45, WT DOCKET NO. 10-208 BEFORE THE FEDERAL COMMUNICATIONS COMMISSION

REDACTED – FOR PUBLIC INSPECTION

NECA has also complied with the requirement of the *Third Protective Order* for delivery of both the confidential and redacted copies of the filing.

A handwritten signature in cursive script that reads "Regina McNeil". The signature is written in black ink and is positioned above the "Enclosures" text.

Enclosures

FCC Bifurcated Approach to Broadband Support for Rate-of-Return Regulated Companies

General Modeling Assumptions

Introduction

Modeling the FCC's proposed bifurcated approach for broadband funding requires making significant assumptions about a number of factors, including potential changes in loop investment, plant retirements and overall changes in loop costs for small rate-of-return local exchange carriers (RLECs) over time. The assumptions used can produce materially different model results.

The following preliminary analysis presents three scenarios intended to simulate potential effects of the concept under different potential growth assumptions. Average actual loop cost growth for the past two years for a consistent sample of 740 cost companies has been -0.20% (equivalent to approximately -2% over 10 years). The attached analysis assumes that future growth rates could change in three different ways:

Scenario 1 utilizes recent investment and retirement loop cost trends. Growth and retirement rates for companies with the least depreciated plant (representing recent significant investment) are applied to companies with the most depreciated plant (representing companies most likely to begin material investment in future) and vice versa. This scenario assumes that companies who have built out broadband recently will reduce investment levels, and companies that have not yet built out broadband will invest at a rate similar to companies that have recently built out their networks.

Scenario 2 assumes each company's future investment equals the sum of its depreciation expense on old and new investment. This scenario produces aggregate investment close to recent trends.

Scenario 3 assumes each company's future investment equals the sum of its depreciation expense on old and new investment, plus 20 percent. This scenario assumes that companies will invest more heavily in broadband going forward.

Summary of Growth Assumption Results¹

Scenario 1 results in substantial reductions in modeled aggregate loop costs over 10 years (-19%); Scenario 2 results in a modest aggregate reduction (-5%); and Scenario 3 results in an aggregate increase in loop costs of 4%.

¹As explained briefly above, the results shown in this filing are based on a number of significant assumptions, which may not be accurate. Therefore, NECA cannot state with any certainty the modeled results are representative of what would actually happen. Additionally, there are a number of issues still open in this proceeding, which are not considered and could alter the results, *e.g.* extent of changes to Parts 32, 36, 54, and 69, treatment of new investment costs associated with a 100% interstate assignment of voice-only service for which there is no existing interstate recovery mechanism, treatment of intrastate local service revenues and state high cost support associated with voice only and voice-data new investment loop costs assigned 100% interstate, introduction of additional budget control mechanisms, and potential effects on current voice-data DSL rates and achievement of FCC broadband rate benchmarks.

The new mechanism benchmarks, derived for each scenario based on year 10 modeled aggregate loop costs and the loop support budget target, are \$39 for scenario 1, \$59 for scenario 2 and \$71 for scenario 3. Additional broadband transmission costs must be added to these loop benchmarks when evaluating customer effects.

Detailed modeled results for each of these growth assumptions are included in the attached displays.

General Modeling Assumptions

-Loop costs remain as defined in current rules. Operating expenses follow investment per current rules.

-Loop costs associated with investment in place by a Date Certain (assumed to be December 31, 2015 for modeling) remain in existing ICLS and HCLS mechanisms. These old loop costs will continue to be assigned 25% interstate for voice only and voice-data services and 100% interstate for broadband-only services.

-Loop costs associated with investment after the Date Certain will go into the new support mechanism. This new investment will be considered 100% broadband and costs are assigned 100% interstate, including voice only and voice-data loop costs.

-The rate of investment going into the new mechanism will vary by company. For example, a company that completed Fiber-to-the-Premises (FTTP) deployment in 2015 will have little loop cost in the new mechanism, whereas a company just beginning its FTTP deployment in 2016 will have a more rapid increase in loop costs in the new mechanism.

-Service to customers will utilize a combination of old and new investment for a substantial period of time, and the mix of old vs. new will vary by company over time. This means that the amount of loop costs recovered from end users through subscriber line charges (SLCs), existing HCLS support, or benchmarks under the new mechanism must be prorated by company over time, based on the percentage of loop costs a company has in the old mechanisms vs. the new mechanism.

--For example, in 2018 if a company has 80% of its loop cost in old and 20% in new, its 2018 SLCs will be 80% of current levels (i.e., \$5.20/\$7.36) and the NACPL will likewise be at 80% of the current frozen level (i.e., \$518.30). Its benchmark for the new mechanism will be set at 20% of the new mechanism benchmark. If another company has 60% of its loop costs in old and 40% in new, in 2018 its SLCs will be \$3.90/\$5.52, its NACPL will be \$388.72 and its new mechanism benchmark will be at 40%. These results will vary by company depending on the company's investment levels going forward.

-Imputed revenues associated with the new mechanism benchmark will be billed via existing special access rates, along with additional non-loop costs associated with broadband transmission services.

-Broadband-only service high cost support provided using old investment will equal the sum of ICLS and HCLS per voice line. Broadband support, which will be estimated and trued up similar to current ICLS, will be subtracted from Interstate special access revenue requirement prior to setting rates.

FCC Bifurcated Approach to Broadband Support for RLEC Companies

Technical Notes and Assumptions

In addition to the General Modeling Assumptions, the following are Technical Notes and Assumptions pertaining to the modeling of the FCC's Bifurcated Mechanism:

Growth assumptions vary by scenario as follows:

Scenario 1: Investment is modeled for old and new mechanisms based two year average growth and removal rates with higher growth rates applied to study areas with higher percent of depreciated plant (growth rates based on data in Exhibit 1). Companies were stratified into four groups, and an annual investment growth amount was calculated based on the two year average. This fixed amount is added annually to the new mechanism investment.

Scenario 2: The old depreciation expense for the base year becomes the New TPIS for 2016. For the ensuing years, the New TPIS is grown by the sum of the depreciation expense amounts for both the old and new investment from the prior year.

Scenario 3: The old depreciation expense for the base year grown by 20 percent becomes the New TPIS for 2016. For the ensuing years, the New TPIS is grown by the sum of the depreciation expense amounts for both the old and new investment from the prior year, grown by 20 percent.

Common assumptions for all three scenarios:

1. Price outs assume 100% of study areas remain on rate of return regulation.
2. Preliminary modeling is based on HCLS definition for loop cost. Actual loop costs assigned to interstate under current FCC rules include additional cost assignments. Further modeling refinements could include the application of an adjustment factor to increase modeled interstate loop costs. This would more closely simulate the effects of the Commission's actual cost allocation rules.
3. The 2015 and new mechanism cost amounts are based on HCLS Data used to support the frozen NACPL calculation (i.e., 2014 annual submission plus quarterly updates).
4. Depreciation expense for old investment for all scenarios is based on the relationship by study area between 2015 depreciation expense and 2015 TPIS applied annually to the corresponding old TPIS amount.

5. Retirements of old investment for all scenarios are based on an annual fixed amount (based on stratified group data in Exhibit 1) using the two-year average applied to the 2015 TPIS amount with higher removal rates applied to study areas with higher percent of depreciated plant.
6. For new mechanism investment, a 20 year life is assumed (average of longer CWF and shorter COE) resulting in an annual depreciation rate of 5% applied to new TPIS. It is assumed for all of the scenarios that no new investment is removed over the 10 year period.
7. Expenses, other than depreciation expense and accumulated depreciation reserve, are allocated between old and new based on the relationship of new loop TPIS to Total Loop TPIS.
8. Bifurcated benchmarks, needed to reflect the use of both old and new investment to provide service, were calculated as follows:
 - a. The frozen NACPL and new mechanism benchmark were adjusted annually based on the percent of loop cost in "old" versus "new" by study area.
 - b. SLCs were adjusted annually by percent reduction in Common Line revenue requirements by study area.
 - c. The benchmark revenue for the new mechanism was derived for each scenario based on loop support budget available in year 10, applied to lines with a data component and adjusted to reflect percent of loop cost in the new mechanism by year by study area.
9. Broadband Lines are based on lines reported by NECA DSL pool participants from June 2015 reported counts, extrapolated to the total population of RLECs. These line counts along with voice only and voice data lines are grown based on the most recent two year average change among NECA DSL pool participants. Voice only line growth was -11.65% and Voice-Data and Data-Only combined growth was +2.49%. Cat 1.3 loop growth was assumed to be -3.25%.
10. Average Schedule companies' data was modeled based on aggregate cost company trends.
11. RLEC CAF-ICC was based on trending data from the June 2015 NECA Annual Access Tariff Filing extrapolated to the total RLEC population.
12. ICLS amounts were based on the June 2015 NECA Annual Access Tariff filing, supplemented with USAC ICLS projected data for those study areas not in NECA's Common Line tariff. Common Line revenue requirements were reduced by the proportion of old loop costs to total (old plus new) loop costs.
13. The Corporate Operations Expense Limit is reflected in both old and new mechanism support calculations, applied to total expense prior to allocation to old and new.
14. The \$3000 annual cap on support is applied to the sum of old investment and new investment support divided by sum of 1.3 loops plus data-only lines.
15. Safety Valve and Safety Net Support are not included in the modeling of support amounts.

FCC Bifurcated Mechanism - Preliminary Modeling
 Scenario 1: Growth factors stratified by depreciation levels; Benchmark = \$39
 Work in Progress Draft for Discussion Only
 Subject to Change Based on Further Analysis

	Base Year 2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Legacy Support Mechanisms -Existing Investment											
High Cost Loop Support Cap	\$ 744,035,047	\$ 721,713,996	\$ 700,062,576	\$ 679,060,698	\$ 658,688,877	\$ 638,928,211	\$ 619,760,365	\$ 601,167,554	\$ 583,132,527	\$ 565,638,551	\$ 548,669,395
High Cost Loop Support with Frozen NACPL after Adjustment Factor	\$ 731,812,562	\$ 708,862,667	\$ 686,143,562	\$ 665,114,686	\$ 644,588,159	\$ 624,428,344	\$ 604,298,527	\$ 584,719,539	\$ 565,721,283	\$ 546,371,000	\$ 504,088,237
Adjustment Factor		0.97	0.94	0.93	0.91	0.91	0.92	0.93	0.95	0.99	1.00
ICLS	939,987,541	914,375,970	887,467,609	859,781,209	829,554,630	798,434,670	764,898,509	729,701,680	692,267,929	656,879,591	625,894,890
Broadband Only Support-Old Investment											
HCLS		\$ 16,290,717	\$ 16,458,679	\$ 16,984,141	\$ 17,539,730	\$ 18,120,363	\$ 18,800,234	\$ 19,560,173	\$ 20,386,670	\$ 20,855,322	\$ 19,185,773
ICLS		\$ 21,965,544	\$ 22,416,067	\$ 23,088,435	\$ 23,700,286	\$ 24,310,256	\$ 24,829,624	\$ 25,187,375	\$ 25,185,782	\$ 25,529,961	\$ 25,918,368
Total Broadband Only Support-Old Investment		\$ 38,256,261	\$ 38,874,745	\$ 40,072,576	\$ 41,240,016	\$ 42,430,619	\$ 43,629,858	\$ 44,747,548	\$ 45,572,452	\$ 46,385,283	\$ 45,104,141
Broadband Support - New Investment											
Percent of Revenue Requirement Assigned to New Mechanism		3.68%	7.34%	11.02%	14.83%	18.67%	22.69%	26.89%	31.23%	35.39%	39.27%
Loop Cost Assigned to Special Access	\$ 131,783,069	\$ 259,740,845	\$ 383,902,869	\$ 504,297,345	\$ 620,951,220	\$ 733,890,256	\$ 843,139,101	\$ 948,721,349	\$ 1,050,659,604	\$ 1,148,975,533	\$ 1,148,975,533
Benchmark Revenue	\$ 45,327,107	\$ 91,767,767	\$ 140,909,127	\$ 195,615,213	\$ 250,749,314	\$ 311,030,597	\$ 375,067,705	\$ 441,269,912	\$ 505,243,393	\$ 565,309,217	\$ 565,309,217
Broadband Support- New Investment	\$ 86,157,956	\$ 167,287,271	\$ 241,899,825	\$ 307,125,807	\$ 368,108,926	\$ 420,073,589	\$ 464,534,194	\$ 503,159,829	\$ 540,350,381	\$ 577,685,999	\$ 577,685,999
Total Loop "Old" Investment High Cost Support	\$ 1,671,800,103	\$ 1,661,494,898	\$ 1,612,485,916	\$ 1,564,968,471	\$ 1,515,382,805	\$ 1,465,293,633	\$ 1,412,826,894	\$ 1,359,168,767	\$ 1,303,561,664	\$ 1,249,635,874	\$ 1,175,087,268
Total Loop High Cost Support Old plus New	\$ 1,671,800,103	\$ 1,747,652,854	\$ 1,779,773,187	\$ 1,806,868,296	\$ 1,822,508,612	\$ 1,833,402,559	\$ 1,832,900,483	\$ 1,823,702,961	\$ 1,806,721,493	\$ 1,789,986,255	\$ 1,752,773,267
RLEC CAF-ICC	\$ 360,461,733	\$ 359,361,003	\$ 338,242,181	\$ 331,302,846	\$ 323,995,083	\$ 313,331,435	\$ 300,076,384	\$ 287,347,355	\$ 275,134,819	\$ 263,433,639	\$ 252,232,342
RLEC High Cost Support Old plus New with CAF ICC	\$ 2,032,261,836	\$ 2,107,013,857	\$ 2,118,015,368	\$ 2,138,171,142	\$ 2,146,503,695	\$ 2,146,733,994	\$ 2,132,976,867	\$ 2,111,050,316	\$ 2,081,856,312	\$ 2,053,419,894	\$ 2,005,005,609
Total RLEC High Cost Support Budget	\$2,000,000,000	\$2,000,000,000	\$2,000,000,000	\$2,000,000,000	\$2,000,000,000	\$2,000,000,000	\$2,000,000,000	\$2,000,000,000	\$2,000,000,000	\$2,000,000,000	\$2,000,000,000
Budget Variance	\$32,261,836	\$107,013,857	\$118,015,368	\$138,171,142	\$146,503,695	\$146,733,994	\$132,976,867	\$111,050,316	\$81,856,312	\$53,419,894	\$5,005,609
Budget Variance per Broadband Line per Month	\$1.17	\$3.79	\$4.08	\$4.66	\$4.82	\$4.71	\$4.17	\$3.39	\$2.44	\$1.55	\$0.14

FCC Bifurcated Mechanism - Preliminary Modeling
Scenario 1: Growth factors stratified by depreciation levels; Benchmark = \$39
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 Subject to Change Based on Further Analysis
 Impacts Compared to Legacy Support

	All Study Areas						Study Areas Losing Support					Study Areas Gaining Support							
	Count	Loops	2015 Legacy Support	2025 Bifurcated Support	\$ Change	% Change	Count	Loops	% Loss of Support	SARs Losing More Than 50% Support	Average Loss per Loop per Month	Max Loss per Loop per Month	Count	Loops	% Gain of Support	SARs Gaining More Than 50% Support	Average Gain per Loop per Month	Max Gain per Loop per Month	
All Study Areas	1092	3,896,350	\$1,671.8 M	\$1,752.8 M	\$81.0 M	4.8%	448	1,677,052	-14.9%	2	\$7	\$76	644	2,219,298	31.6%	165	\$8	\$88	
Groups By Loop Count																			
0 - 500	161	46,112	\$39.6 M	\$38.4 M	-\$1.3 M	-3.2%	73	17,859	-17.9%	1	\$19	\$76	88	28,253	17.4%	10	\$9	\$88	
501 - 1000	203	147,530	\$118.0 M	\$115.0 M	-\$3.0 M	-2.6%	76	56,572	-16.8%	1	\$19	\$76	127	90,958	25.3%	30	\$9	\$40	
1001 - 2500	305	489,409	\$309.0 M	\$314.4 M	\$5.4 M	1.7%	121	191,490	-13.1%	0	\$11	\$70	184	297,919	25.9%	41	\$9	\$66	
2501 - 5000	206	733,718	\$411.2 M	\$421.3 M	\$10.1 M	2.5%	88	309,760	-15.2%	0	\$11	\$70	118	423,958	34.1%	37	\$10	\$49	
5001 - 10000	134	928,888	\$381.5 M	\$425.4 M	\$43.9 M	11.5%	49	349,919	-13.3%	0	\$6	\$59	85	578,969	36.5%	35	\$10	\$39	
10001 - 20000	61	824,204	\$273.4 M	\$289.8 M	\$16.5 M	6.0%	30	385,554	-15.5%	0	\$5	\$14	31	438,650	30.5%	10	\$7	\$31	
> 20000	22	726,489	\$139.0 M	\$148.4 M	\$9.4 M	6.8%	11	365,898	-19.3%	0	\$3	\$8	11	360,591	32.0%	2	\$5	\$22	
Groups By CPL Percentile																			
10%: \$0 - \$542	109	681,903	\$68.2 M	\$95.0 M	\$26.7 M	39.2%	30	223,259	-17.5%	0	\$2	\$4	79	458,644	75.2%	47	\$6	\$37	
25%: \$542 - \$656	164	855,014	\$123.8 M	\$148.6 M	\$24.8 M	20.0%	74	405,154	-9.4%	0	\$1	\$10	90	449,860	47.5%	31	\$6	\$30	
50%: \$656 - \$886	273	768,674	\$180.2 M	\$227.8 M	\$47.6 M	26.4%	44	211,647	-15.9%	0	\$4	\$15	229	557,027	47.2%	52	\$9	\$63	
75%: \$886 - \$1,351	273	1,040,942	\$539.1 M	\$581.1 M	\$42.0 M	7.8%	103	450,861	-17.0%	0	\$8	\$45	170	590,081	28.0%	31	\$12	\$50	
90%: \$1,351 - \$2,115	163	425,034	\$465.3 M	\$451.9 M	-\$13.4 M	-2.9%	104	277,035	-11.0%	2	\$10	\$76	59	147,999	13.3%	3	\$12	\$66	
95%: \$2,115 - \$2,898	55	61,760	\$122.0 M	\$114.9 M	-\$7.1 M	-5.8%	39	46,301	-9.8%	0	\$16	\$59	16	15,459	6.3%	1	\$10	\$88	
>95% > \$2,898	55	63,023	\$173.1 M	\$133.5 M	-\$39.7 M	-22.9%	54	62,795	-23.1%	0	\$53	\$76	1	228	12.0%	0	\$30	\$30	
Groups By Settlement Type																			
A/S	308	731,433	\$128.1 M	\$133.5 M	\$5.4 M	4.2%	112	347,101	-8.0%	0	\$1	\$15	196	384,332	14.2%	4	\$2	\$13	
Cost	784	3,164,917	\$1,543.7 M	\$1,619.3 M	\$75.6 M	4.9%	336	1,329,951	-15.4%	2	\$9	\$76	448	1,834,966	33.6%	161	\$10	\$88	
Groups By Density																			
Less than 1	70	146,303	\$184.4 M	\$178.3 M	-\$6.1 M	-3.3%	39	67,801	-15.2%	0	\$22	\$70	31	78,502	17.4%	7	\$12	\$63	
1 - 3	146	447,474	\$371.1 M	\$360.8 M	-\$10.3 M	-2.8%	82	225,657	-16.0%	0	\$14	\$70	64	221,817	21.1%	9	\$10	\$50	
3 - 10	319	668,329	\$368.8 M	\$384.5 M	\$15.7 M	4.3%	126	241,992	-14.5%	2	\$11	\$76	193	426,337	33.7%	41	\$9	\$51	
10 - 20	241	715,316	\$280.8 M	\$312.6 M	\$31.7 M	11.3%	79	252,769	-12.0%	0	\$6	\$76	162	462,547	35.4%	44	\$9	\$88	
20 - 50	227	1,279,682	\$341.5 M	\$370.0 M	\$28.5 M	8.3%	82	589,206	-15.5%	0	\$4	\$70	145	690,476	37.7%	52	\$7	\$36	
More than 50	89	639,246	\$125.1 M	\$146.6 M	\$21.5 M	17.2%	40	299,627	-17.3%	0	\$2	\$39	49	339,619	39.8%	12	\$7	\$66	
Groups by ACAM 10/1 Deployment																			
0% Deployed	70	72,086	\$55.87 M	\$58.34 M	\$2.5 M	4%	23	22,734	-15%	0	\$15	\$76	47	49,352	22%	11	\$11	\$63	
1% to 25%	241	652,672	\$259.43 M	\$312.39 M	\$53.0 M	20%	75	179,029	-14%	1	\$7	\$70	166	473,643	42%	59	\$12	\$49	
25% to 50%	104	398,339	\$179.0 M	\$184.1 M	\$5.1 M	2.9%	35	142,905	-15.9%	0	\$9	\$70	69	255,434	25.3%	26	\$7	\$30	
50% to 75%	135	555,773	\$210.7 M	\$230.4 M	\$19.7 M	9.3%	48	182,589	-15.3%	0	\$8	\$70	87	373,184	39.5%	24	\$8	\$51	
75% to 99%	384	1,607,013	\$680.8 M	\$690.8 M	\$9.9 M	1.5%	186	838,903	-15.2%	1	\$6	\$76	198	768,110	29.0%	36	\$8	\$88	
100% Deployed	158	610,467	\$286.0 M	\$276.8 M	-\$9.2 M	-3.2%	81	310,892	-13.9%	0	\$7	\$70	77	299,575	20.5%	9	\$5	\$33	
Groups By Census Region																			
Northeast	81	259,755	\$39.8 M	\$49.0 M	\$9.2 M	23.1%	24	95,307	-11.6%	0	\$1	\$9	57	164,448	41.4%	18	\$5	\$23	
Midwest	569	1,354,335	\$650.9 M	\$669.3 M	\$18.4 M	2.8%	239	593,099	-13.0%	2	\$7	\$76	330	761,236	27.7%	58	\$8	\$88	
South	263	1,710,994	\$577.5 M	\$638.5 M	\$61.1 M	10.6%	91	720,831	-16.9%	0	\$6	\$70	172	990,163	39.2%	69	\$9	\$50	
West	179	571,266	\$403.7 M	\$396.0 M	-\$7.7 M	-1.9%	94	267,815	-15.8%	0	\$13	\$76	85	303,451	22.1%	20	\$9	\$63	

Note: Northeast: ME, NH, VT, MA, RI, CT, NY, PA, NJ; Midwest: WI, MI, IL, IN, OH, MO, ND, SD, NE, KS, MN, IA; South: DE, MD, DC, VA, WV, NC, SC, GA, FL, KY, TN, MS, AL, OK, TX, AR, LA; West: ID, MT, WY, NV, UT, CO, AZ, NM, AK, WA, OR, CA, HI, GU, AS

FCC Bifurcated Mechanism - Preliminary Modeling
Scenario 2: Growth equals depreciation expense in new and old; Benchmark = \$59
 Work in Progress Draft for Discussion Only
 Subject to Change Based on Further Analysis

	Base Year 2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Legacy Support Mechanisms -Existing Investment											
High Cost Loop Support Cap	\$ 744,035,047	\$ 721,713,996	\$ 700,062,576	\$ 679,060,698	\$ 658,688,877	\$ 638,928,211	\$ 619,760,365	\$ 601,167,554	\$ 583,132,527	\$ 565,638,551	\$ 548,669,395
High Cost Loop Support with Frozen NACPL after Adjustment Factor	\$ 731,812,562	\$ 707,021,781	\$ 682,183,100	\$ 660,636,766	\$ 639,198,332	\$ 617,903,146	\$ 596,673,556	\$ 576,132,347	\$ 556,183,939	\$ 536,718,224	\$ 516,164,745
Adjustment Factor		0.97	0.94	0.91	0.89	0.87	0.87	0.87	0.89	0.93	0.99
ICLS	939,987,541	887,547,320	834,947,898	783,064,353	729,926,688	678,841,910	627,866,467	578,475,564	529,793,715	488,569,243	454,134,763
Broadband Only Support-Old Investment											
HCLS		\$ 16,283,637	\$ 16,430,275	\$ 17,079,973	\$ 17,744,086	\$ 18,423,286	\$ 19,179,423	\$ 19,984,547	\$ 20,842,102	\$ 21,393,449	\$ 20,789,466
ICLS		\$ 21,276,467	\$ 20,997,234	\$ 20,874,888	\$ 20,645,707	\$ 20,408,103	\$ 20,037,465	\$ 19,485,271	\$ 18,513,877	\$ 18,208,718	\$ 17,921,753
Total Broadband Only Support-Old Investment		\$ 37,560,104	\$ 37,427,509	\$ 37,954,861	\$ 38,389,792	\$ 38,831,388	\$ 39,216,888	\$ 39,469,819	\$ 39,355,979	\$ 39,602,167	\$ 38,711,219
Broadband Support - New Investment											
Percent of Revenue Requirement Assigned to New Mechanism		6.35%	12.48%	18.48%	24.42%	30.00%	35.47%	40.74%	45.74%	50.09%	53.80%
Loop Cost Assigned to Special Access	\$ 231,546,723	\$ 458,127,703	\$ 680,705,806	\$ 895,588,268	\$ 1,096,547,523	\$ 1,284,590,071	\$ 1,455,327,983	\$ 1,606,614,906	\$ 1,737,255,409	\$ 1,851,480,787	\$ 1,851,480,787
Benchmark Revenue	\$ 105,605,252	\$ 211,928,241	\$ 321,965,724	\$ 435,479,268	\$ 544,815,212	\$ 660,087,663	\$ 772,443,249	\$ 882,990,781	\$ 980,602,378	\$ 1,068,143,880	\$ 1,068,143,880
Broadband Support- New Investment	\$ 124,637,029	\$ 242,832,764	\$ 353,081,003	\$ 451,428,967	\$ 539,141,346	\$ 607,014,552	\$ 659,944,417	\$ 694,658,288	\$ 721,640,151	\$ 740,355,613	\$ 740,355,613
Total Loop "Old" Investment High Cost Support	\$ 1,671,800,103	\$ 1,632,129,205	\$ 1,554,558,507	\$ 1,481,655,980	\$ 1,407,514,812	\$ 1,335,576,444	\$ 1,263,756,911	\$ 1,194,077,730	\$ 1,125,333,633	\$ 1,064,889,634	\$ 1,009,010,727
Total Loop High Cost Support Old plus New	\$ 1,671,800,103	\$ 1,756,766,234	\$ 1,797,391,271	\$ 1,834,736,983	\$ 1,858,943,779	\$ 1,874,717,790	\$ 1,870,771,463	\$ 1,854,022,147	\$ 1,819,991,921	\$ 1,786,529,785	\$ 1,749,366,340
RLEC CAF-ICC	\$ 360,461,733	\$ 359,361,003	\$ 338,242,181	\$ 331,302,846	\$ 323,995,083	\$ 313,331,435	\$ 300,076,384	\$ 287,347,355	\$ 275,134,819	\$ 263,433,639	\$ 252,232,342
RLEC High Cost Support Old plus New with CAF ICC	\$ 2,032,261,836	\$ 2,116,127,237	\$ 2,135,633,452	\$ 2,166,039,829	\$ 2,182,938,863	\$ 2,188,049,226	\$ 2,170,847,847	\$ 2,141,369,502	\$ 2,095,126,740	\$ 2,049,963,424	\$ 2,001,598,683
Total RLEC High Cost Support Budget	\$2,000,000,000										
Budget Variance	\$32,261,836	\$116,127,237	\$135,633,452	\$166,039,829	\$182,938,863	\$188,049,226	\$170,847,847	\$141,369,502	\$95,126,740	\$49,963,424	\$1,598,683
Budget Variance per Broadband Line per Month	\$1.17	\$4.11	\$4.69	\$5.60	\$6.02	\$6.04	\$5.35	\$4.32	\$2.84	\$1.45	\$0.05

FCC Bifurcated Mechanism - Preliminary Modeling
Scenario 2: Growth equals depreciation expense in new and old; Benchmark = \$59
 Work in Progress Draft for Discussion Only
 Subject to Change Based on Further Analysis
 Impacts Compared to Legacy Support

	All Study Areas						Study Areas Losing Support					Study Areas Gaining Support							
	Count	Loops	2015 Legacy Support	2025 Bifurcated Support	\$ Change	% Change	Count	Loops	% Loss of Support	SARs Losing More Than 50% Support	Average Loss per Loop per Month	Max Loss per Loop per Month	Count	Loops	% Gain of Support	SARs Gaining More Than 50% Support	Average Gain per Loop per Month	Max Gain per Loop per Month	
All Study Areas	1092	3,896,350	\$1,671.8 M	\$1,749.4 M	\$77.6 M	4.6%	524	2,187,848	-20.4%	31	\$6	\$70	568	1,708,502	25.3%	60	\$11	\$87	
Groups By Loop Count																			
0 - 500	161	46,112	\$39.6 M	\$38.8 M	-\$0.9 M	-2.2%	75	19,348	-19.6%	1	\$17	\$70	86	26,764	15.6%	3	\$10	\$87	
501 - 1000	203	147,530	\$118.0 M	\$114.5 M	-\$3.5 M	-3.0%	88	66,082	-18.1%	2	\$16	\$70	115	81,448	18.1%	9	\$9	\$42	
1001 - 2500	305	489,409	\$309.0 M	\$316.2 M	\$7.1 M	2.3%	152	239,634	-16.9%	11	\$9	\$70	153	249,775	19.7%	13	\$11	\$55	
2501 - 5000	206	733,718	\$411.2 M	\$435.2 M	\$24.0 M	5.8%	91	330,659	-18.8%	2	\$9	\$70	115	403,059	26.0%	14	\$12	\$52	
5001 - 10000	134	928,888	\$381.5 M	\$421.6 M	\$40.1 M	10.5%	66	460,931	-23.4%	8	\$5	\$59	68	467,957	25.8%	15	\$12	\$40	
10001 - 20000	61	824,204	\$273.4 M	\$299.9 M	\$26.5 M	9.7%	35	470,642	-18.4%	5	\$4	\$9	26	353,562	32.7%	6	\$12	\$24	
> 20000	22	726,489	\$139.0 M	\$123.2 M	-\$15.8 M	-11.4%	17	600,552	-29.4%	2	\$4	\$9	5	125,937	25.9%	0	\$8	\$26	
Groups By CPL Percentile																			
10%: \$0 - \$542	109	681,903	\$68.2 M	\$48.0 M	-\$20.2 M	-29.6%	84	590,389	-37.7%	8	\$3	\$13	25	91,514	28.7%	4	\$2	\$7	
25%: \$542 - \$656	164	855,014	\$123.8 M	\$92.7 M	-\$31.1 M	-25.1%	139	726,168	-34.9%	20	\$4	\$13	25	128,846	28.1%	5	\$4	\$13	
50%: \$656 - \$886	273	768,674	\$180.2 M	\$200.2 M	\$20.0 M	11.1%	87	307,709	-16.6%	1	\$3	\$20	186	460,965	31.2%	29	\$6	\$31	
75%: \$886 - \$1,351	273	1,040,942	\$539.1 M	\$610.8 M	\$71.7 M	13.3%	96	402,854	-14.5%	1	\$6	\$68	177	638,088	30.6%	20	\$13	\$40	
90%: \$1,351 - \$2,115	163	425,034	\$465.3 M	\$534.3 M	\$69.0 M	14.8%	43	76,229	-12.0%	1	\$12	\$66	120	348,805	21.2%	1	\$19	\$55	
95%: \$2,115 - \$2,898	55	61,760	\$122.0 M	\$128.1 M	\$6.1 M	5.0%	21	21,704	-7.9%	0	\$14	\$59	34	40,056	13.2%	1	\$20	\$87	
>95% > \$2,898	55	63,023	\$173.1 M	\$135.2 M	-\$37.9 M	-21.9%	54	62,795	-22.0%	0	\$50	\$70	1	228	12.0%	0	\$30	\$30	
Groups By Settlement Type																			
A/S	308	731,433	\$128.1 M	\$109.0 M	-\$19.2 M	-15.0%	156	550,230	-33.7%	18	\$4	\$22	152	181,203	21.2%	9	\$4	\$24	
Cost	784	3,164,917	\$1,543.7 M	\$1,640.4 M	\$96.7 M	6.3%	368	1,637,618	-18.7%	13	\$6	\$70	416	1,527,299	25.5%	51	\$12	\$87	
Groups By Density																			
Less than 1	70	146,303	\$184.4 M	\$189.6 M	\$5.2 M	2.8%	34	45,740	-16.8%	0	\$26	\$70	36	100,563	20.0%	2	\$16	\$40	
1 - 3	146	447,474	\$371.1 M	\$390.5 M	\$19.4 M	5.2%	63	150,867	-17.4%	2	\$15	\$70	83	296,607	21.3%	5	\$13	\$39	
3 - 10	319	668,329	\$368.8 M	\$399.7 M	\$30.9 M	8.4%	124	250,367	-17.3%	2	\$9	\$70	195	417,962	25.7%	15	\$11	\$55	
10 - 20	241	715,316	\$280.8 M	\$313.9 M	\$33.1 M	11.8%	109	312,155	-18.8%	8	\$5	\$70	132	403,161	26.5%	10	\$10	\$87	
20 - 50	227	1,279,682	\$341.5 M	\$331.5 M	-\$10.1 M	-2.9%	139	975,245	-23.0%	9	\$4	\$70	88	304,437	29.2%	16	\$10	\$40	
More than 50	89	639,246	\$125.1 M	\$124.2 M	-\$0.9 M	-0.7%	55	453,474	-32.9%	10	\$4	\$39	34	185,772	34.9%	12	\$9	\$55	
Groups by ACAM 10/1 Deployment																			
0% Deployed	70	72,086	\$55.87 M	\$57.13 M	\$1.3 M	2%	31	37,737	-14%	1	\$11	\$70	39	34,349	31%	3	\$15	\$40	
1% to 25%	241	652,672	\$259.43 M	\$285.11 M	\$25.7 M	10%	113	292,203	-21%	12	\$5	\$70	128	360,469	26%	14	\$10	\$40	
25% to 50%	104	398,339	\$179.0 M	\$184.6 M	\$5.6 M	3.1%	64	263,382	-18.7%	1	\$5	\$70	40	134,957	23.4%	2	\$13	\$42	
50% to 75%	135	555,773	\$210.7 M	\$216.2 M	\$5.5 M	2.6%	64	332,688	-22.4%	3	\$6	\$70	71	223,085	25.7%	11	\$11	\$55	
75% to 99%	384	1,607,013	\$680.8 M	\$701.2 M	\$20.4 M	3.0%	183	937,707	-20.6%	10	\$6	\$70	201	669,306	25.2%	21	\$11	\$87	
100% Deployed	158	610,467	\$286.0 M	\$305.1 M	\$19.1 M	6.7%	69	324,131	-20.6%	4	\$6	\$70	89	286,336	25.3%	9	\$13	\$52	
Groups By Census Region																			
Northeast	81	259,755	\$39.8 M	\$34.3 M	-\$5.5 M	-13.7%	53	189,340	-30.6%	2	\$4	\$15	28	70,415	21.9%	4	\$3	\$22	
Midwest	569	1,354,335	\$650.9 M	\$718.7 M	\$67.8 M	10.4%	244	540,272	-20.4%	16	\$7	\$70	325	814,063	26.1%	30	\$12	\$87	
South	263	1,710,994	\$577.5 M	\$587.7 M	\$10.2 M	1.8%	129	1,129,378	-21.0%	11	\$5	\$70	134	581,616	24.9%	19	\$10	\$40	
West	179	571,266	\$403.7 M	\$408.6 M	\$5.0 M	1.2%	98	328,858	-18.2%	2	\$10	\$70	81	242,408	24.3%	7	\$15	\$42	

Note: Northeast: ME, NH, VT, MA, RI, CT, NY, PA, NJ; Midwest: WI, MI, IL, IN, OH, MO, ND, SD, NE, KS, MN, IA; South: DE, MD, DC, VA, WV, NC, SC, GA, FL, KY, TN, MS, AL, OK, TX, AR, LA; West: ID, MT, WY, NV, UT, CO, AZ, NM, AK, WA, OR, CA, HI, GU, AS

REDACTED – FOR PUBLIC INSPECTION

FCC Bifurcated Mechanism - Preliminary Modeling
 Scenario 3: Growth equals depreciation expense in new and old, grown by 20%; Benchmark = \$71
 Work in Progress Draft for Discussion Only
 Subject to Change Based on Further Analysis

	Base Year 2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Legacy Support Mechanisms -Existing Investment											
High Cost Loop Support Cap	\$ 744,035,047	\$ 721,713,996	\$ 700,062,576	\$ 679,060,698	\$ 658,688,877	\$ 638,928,211	\$ 619,760,365	\$ 601,167,554	\$ 583,132,527	\$ 565,638,551	\$ 548,669,395
High Cost Loop Support with Frozen NACPL after Adjustment Factor	\$ 731,812,562	\$ 706,584,707	\$ 681,206,309	\$ 659,630,468	\$ 638,094,150	\$ 616,679,221	\$ 595,234,199	\$ 574,481,988	\$ 554,385,460	\$ 534,575,045	\$ 513,757,831
Adjustment Factor		0.97	0.94	0.90	0.87	0.86	0.85	0.85	0.87	0.90	0.96
ICLS	939,987,541	876,227,862	813,473,684	752,560,137	691,346,100	633,331,261	576,438,454	522,165,227	469,485,202	424,907,595	387,825,663
Broadband Only Support-Old Investment											
HCLS		\$ 16,281,935	\$ 16,423,194	\$ 17,105,156	\$ 17,793,316	\$ 18,488,541	\$ 19,243,044	\$ 20,050,894	\$ 20,919,869	\$ 21,493,657	\$ 20,934,294
ICLS		\$ 21,009,537	\$ 20,463,928	\$ 20,068,795	\$ 19,564,964	\$ 19,059,590	\$ 18,423,640	\$ 17,610,876	\$ 16,371,990	\$ 15,810,623	\$ 15,264,765
Total Broadband Only Support-Old Investment		\$ 37,291,472	\$ 36,887,122	\$ 37,173,951	\$ 37,358,280	\$ 37,548,131	\$ 37,666,683	\$ 37,661,771	\$ 37,291,859	\$ 37,304,280	\$ 36,199,058
Broadband Support - New Investment											
Percent of Revenue Requirement Assigned to New Mechanism		7.53%	14.70%	21.64%	28.39%	34.65%	40.71%	46.48%	51.89%	56.56%	60.54%
Loop Cost Assigned to Special Access		\$ 276,911,295	\$ 548,781,482	\$ 816,910,592	\$ 1,077,141,471	\$ 1,322,411,739	\$ 1,554,067,892	\$ 1,767,178,974	\$ 1,959,328,522	\$ 2,129,199,032	\$ 2,281,747,608
Benchmark Revenue		\$ 149,208,094	\$ 297,425,865	\$ 447,884,847	\$ 598,672,171	\$ 744,265,722	\$ 893,653,346	\$ 1,038,256,413	\$ 1,178,815,422	\$ 1,302,132,895	\$ 1,412,701,828
Broadband Support- New Investment		\$ 126,109,588	\$ 247,139,979	\$ 361,835,263	\$ 467,302,829	\$ 561,778,786	\$ 637,414,702	\$ 698,364,322	\$ 741,501,016	\$ 778,915,756	\$ 809,395,046
Total Loop "Old" Investment High Cost Support	\$ 1,671,800,103	\$ 1,620,104,041	\$ 1,531,567,115	\$ 1,449,364,556	\$ 1,366,798,530	\$ 1,287,558,613	\$ 1,209,339,336	\$ 1,134,308,986	\$ 1,061,162,521	\$ 996,786,920	\$ 937,782,552
Total Loop High Cost Support Old plus New	\$ 1,671,800,103	\$ 1,746,213,629	\$ 1,778,707,094	\$ 1,811,199,819	\$ 1,834,101,359	\$ 1,849,337,399	\$ 1,846,754,038	\$ 1,832,673,308	\$ 1,802,663,537	\$ 1,775,702,676	\$ 1,747,177,598
RLEC CAF-ICC	\$ 360,461,733	\$ 359,361,003	\$ 338,242,181	\$ 331,302,846	\$ 323,995,083	\$ 313,331,435	\$ 300,076,384	\$ 287,347,355	\$ 275,134,819	\$ 263,433,639	\$ 252,232,342
RLEC High Cost Support Old plus New with CAF ICC	\$ 2,032,261,836	\$ 2,105,574,632	\$ 2,116,949,275	\$ 2,142,502,665	\$ 2,158,096,442	\$ 2,162,668,834	\$ 2,146,830,423	\$ 2,120,020,663	\$ 2,077,798,356	\$ 2,039,136,315	\$ 1,999,409,940
Total RLEC High Cost Support Budget	\$2,000,000,000	\$2,000,000,000	\$2,000,000,000	\$2,000,000,000	\$2,000,000,000	\$2,000,000,000	\$2,000,000,000	\$2,000,000,000	\$2,000,000,000	\$2,000,000,000	\$2,000,000,000
Budget Variance	\$32,261,836	\$105,574,632	\$116,949,275	\$142,502,665	\$158,096,442	\$162,668,834	\$146,830,423	\$120,020,663	\$77,798,356	\$39,136,315	(\$590,060)
Budget Variance per Broadband Line per Month	\$1.17	\$3.74	\$4.04	\$4.81	\$5.20	\$5.22	\$4.60	\$3.67	\$2.32	\$1.14	(\$0.02)

FCC Bifurcated Mechanism - Preliminary Modeling
Scenario 3: Growth equals depreciation expense in new and old, grown by 20%; Benchmark = \$71
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 Impacts Compared to Legacy Support

	All Study Areas						Study Areas Losing Support						Study Areas Gaining Support					
	Count	Loops	2015 Legacy Support	2025 Bifurcated Support	\$ Change	% Change	Count	Loops	% Loss of Support	SARs Losing More Than 50% Support	Average Loss per Loop per Month	Max Loss per Loop per Month	Count	Loops	% Gain of Support	SARs Gaining More Than 50% Support	Average Gain per Loop per Month	Max Gain per Loop per Month
All Study Areas	1092	3,896,350	\$1,671.8 M	\$1,747.2 M	\$75.4 M	4.5%	563	2,330,536	-23.4%	94	\$6	\$78	529	1,565,814	28.1%	61	\$14	\$82
Groups By Loop Count																		
0 - 500	161	46,112	\$39.6 M	\$38.6 M	-\$1.1 M	-2.7%	77	20,565	-20.4%	2	\$17	\$70	84	25,547	17.0%	2	\$10	\$82
501 - 1000	203	147,530	\$118.0 M	\$114.3 M	-\$3.7 M	-3.2%	98	72,896	-19.1%	8	\$15	\$72	105	74,634	18.7%	9	\$10	\$44
1001 - 2500	305	489,409	\$309.0 M	\$316.3 M	\$7.2 M	2.3%	161	252,206	-19.5%	28	\$9	\$78	144	237,203	21.5%	15	\$12	\$53
2501 - 5000	206	733,718	\$411.2 M	\$438.3 M	\$27.1 M	6.6%	100	363,110	-21.3%	19	\$9	\$70	106	370,608	28.8%	15	\$15	\$54
5001 - 10000	134	928,888	\$381.5 M	\$422.9 M	\$41.3 M	10.8%	74	518,352	-23.9%	17	\$5	\$59	60	410,536	31.1%	16	\$15	\$42
10001 - 20000	61	824,204	\$273.4 M	\$301.3 M	\$28.0 M	10.2%	35	477,807	-24.0%	10	\$5	\$10	26	346,397	33.3%	4	\$13	\$29
> 20000	22	726,489	\$139.0 M	\$115.5 M	-\$23.5 M	-16.9%	18	625,600	-34.9%	10	\$5	\$11	4	100,889	29.0%	0	\$9	\$31
Groups By CPI Percentile																		
10%: \$0 - \$542	109	681,903	\$68.2 M	\$41.2 M	-\$27.0 M	-39.6%	89	623,778	-45.9%	26	\$4	\$16	20	58,125	41.6%	3	\$3	\$8
25%: \$542 - \$656	164	855,014	\$123.8 M	\$79.9 M	-\$43.9 M	-35.5%	146	763,191	-44.3%	58	\$5	\$15	18	91,823	30.2%	6	\$4	\$16
50%: \$656 - \$886	273	768,674	\$180.2 M	\$190.0 M	\$9.8 M	5.4%	117	396,479	-20.5%	6	\$4	\$23	156	372,195	33.3%	24	\$6	\$39
75%: \$886 - \$1,351	273	1,040,942	\$539.1 M	\$617.0 M	\$77.9 M	14.5%	98	389,880	-16.2%	3	\$7	\$78	175	651,062	32.3%	25	\$14	\$49
90%: \$1,351 - \$2,115	163	425,034	\$465.3 M	\$554.8 M	\$89.5 M	19.2%	40	74,416	-10.3%	1	\$10	\$72	123	350,618	25.8%	3	\$23	\$54
95%: \$2,115 - \$2,898	55	61,760	\$122.0 M	\$129.0 M	\$7.0 M	5.7%	19	19,997	-8.8%	0	\$16	\$59	36	41,763	14.0%	0	\$22	\$82
>95% > \$2,898	55	63,023	\$173.1 M	\$135.2 M	-\$37.9 M	-21.9%	54	62,795	-22.0%	0	\$50	\$70	1	228	12.0%	0	\$30	\$30
Groups By Settlement Type																		
A/S	308	731,433	\$128.1 M	\$98.8 M	-\$29.3 M	-22.9%	173	579,307	-42.1%	50	\$5	\$25	135	152,126	21.9%	10	\$5	\$31
Cost	784	3,164,917	\$1,543.7 M	\$1,648.4 M	\$104.7 M	6.8%	390	1,751,229	-20.9%	44	\$7	\$78	394	1,413,688	28.4%	51	\$15	\$82
Groups By Density																		
Less than 1	70	146,303	\$184.4 M	\$193.6 M	\$9.2 M	5.0%	33	45,960	-17.2%	0	\$27	\$70	37	100,343	24.1%	4	\$20	\$49
1 - 3	146	447,474	\$371.1 M	\$397.8 M	\$26.7 M	7.2%	65	153,990	-17.7%	7	\$14	\$70	81	293,484	24.0%	7	\$15	\$42
3 - 10	319	668,329	\$368.8 M	\$403.3 M	\$34.6 M	9.4%	132	260,462	-20.3%	8	\$9	\$78	187	407,867	28.3%	16	\$13	\$60
10 - 20	241	715,316	\$280.8 M	\$313.1 M	\$32.3 M	11.5%	127	370,163	-20.1%	18	\$5	\$70	114	345,153	30.6%	8	\$13	\$82
20 - 50	227	1,279,682	\$341.5 M	\$321.1 M	-\$20.5 M	-6.0%	149	1,019,472	-28.0%	35	\$5	\$70	78	260,210	31.3%	13	\$13	\$36
More than 50	89	639,246	\$125.1 M	\$118.2 M	-\$6.9 M	-5.5%	57	480,489	-41.5%	26	\$5	\$39	32	158,757	35.4%	13	\$11	\$54
Groups by ACAM 10/1 Deployment																		
0% Deployed	70	72,086	\$55.87 M	\$57.48 M	\$1.6 M	3%	32	35,379	-17%	2	\$13	\$70	38	36,707	30%	7	\$16	\$46
1% to 25%	241	652,672	\$259.43 M	\$285.03 M	\$25.6 M	10%	124	324,467	-25%	24	\$6	\$72	117	328,205	29%	13	\$12	\$39
25% to 50%	104	398,339	\$179.0 M	\$185.3 M	\$6.3 M	3.5%	67	281,286	-20.4%	10	\$5	\$70	37	117,053	27.7%	2	\$18	\$44
50% to 75%	135	555,773	\$210.7 M	\$214.9 M	\$4.2 M	2.0%	70	357,813	-27.1%	13	\$6	\$70	65	197,960	28.0%	9	\$13	\$60
75% to 99%	384	1,607,013	\$680.8 M	\$698.6 M	\$17.7 M	2.6%	194	982,131	-23.8%	30	\$7	\$78	190	624,882	26.3%	20	\$13	\$82
100% Deployed	158	610,467	\$286.0 M	\$305.9 M	\$20.0 M	7.0%	76	349,460	-22.1%	15	\$7	\$70	82	261,007	31.8%	10	\$16	\$54
Groups By Census Region																		
Northeast	81	259,755	\$39.8 M	\$30.5 M	-\$9.2 M	-23.3%	57	215,794	-36.7%	14	\$4	\$18	24	43,961	26.5%	3	\$4	\$22
Midwest	569	1,354,335	\$650.9 M	\$721.1 M	\$70.2 M	10.8%	276	630,736	-21.3%	40	\$7	\$78	293	723,599	29.9%	29	\$14	\$82
South	263	1,710,994	\$577.5 M	\$583.0 M	\$5.5 M	1.0%	134	1,154,550	-25.7%	32	\$5	\$70	129	556,444	25.9%	19	\$12	\$53
West	179	571,266	\$403.7 M	\$412.5 M	\$8.9 M	2.2%	96	329,456	-20.8%	8	\$11	\$70	83	241,810	27.8%	10	\$18	\$49

Note: Northeast: ME, NH, VT, MA, RI, CT, NY, PA, NJ; Midwest: WI, MI, IL, IN, OH, MO, ND, SD, NE, KS, MN, IA; South: DE, MD, DC, VA, WV, NC, SC, GA, FL, KY, TN, MS, AL, OK, TX, AR, LA; West: ID, MT, WY, NV, UT, CO, AZ, NM, AK, WA, OR, CA, HI, GU, AS

Loop Cost Growth/Removal Trends

Exhibit 1

Cost Company by % Depreciated (2014-1 HCL data - latest view of annual submission filed Oct.1)
Based on a consistent sample of 740 cost companies using High Cost Loop data (official view), excluding price cap affiliates

All companies (740)	Account	2011	2012	2013	Variance \$ 11-12	Variance % 11-12	Variance \$ 12-13	Variance % 12-13	Average Variance \$	Average Variance %	Average 2012-2013
	Depreciation Expense	801,670,799	802,728,286	800,346,827	1,057,487	0.13%	(2,381,459)	-0.30%	(661,986)	-0.08%	801,537,557
	Accum. Depreciation	10,545,120,741	10,912,826,547	11,408,936,944	367,705,806	3.49%	496,110,397	4.55%	431,908,102	4.02%	11,160,881,746
	TPIS	16,332,211,147	16,753,141,046	17,276,765,925	420,929,899	2.58%	523,624,879	3.13%	472,277,389	2.85%	17,014,953,486
	Net Plant Invest.	5,944,480,759	6,010,582,738	6,034,754,624	66,101,979	1.11%	24,171,886	0.40%	45,136,933	0.76%	6,022,668,681
	Loop Cost RRQ	3,097,621,856	3,092,700,182	3,085,340,425	(4,921,674)	-0.16%	(7,359,757)	-0.24%	(6,140,715)	-0.20%	3,089,020,304
	TPIS - Accum.Dep.	5,787,090,406	5,840,314,499	5,867,828,981	53,224,093		27,514,482		40,369,288		5,854,071,740
	% Accum.Dep. of TPIS	64.57%	65.14%	66.04%							65.99%
	Avg. Plant Removal										-369,629,455
	Removal Factor										-2.14%

76 - 100% (Most Dep.)	Account	2011	2012	2013	Variance \$ 11-12	Variance % 11-12	Variance \$ 12-13	Variance % 12-13	Average Variance \$	Average Variance %	Average 2012-2013
	Depreciation Expense	128,549,329	121,772,652	112,496,653	(6,776,677)	-5.27%	(9,275,999)	-7.62%	(8,026,338)	-6.44%	117,134,652
	Accum. Depreciation	2,448,881,105	2,520,744,701	2,611,171,657	71,863,596	2.93%	90,426,957	3.59%	81,145,276	3.26%	2,565,958,179
	TPIS	2,913,320,133	2,923,807,661	2,964,498,075	10,487,528	0.36%	40,690,414	1.39%	25,588,971	0.88%	2,944,152,868
	Net Plant Invest.	482,853,026	422,234,167	371,986,193	(60,818,859)	-12.55%	(50,247,974)	-11.90%	(55,433,416)	-12.23%	397,110,180
	Loop Cost RRQ	503,932,337	480,895,018	459,081,519	(23,037,320)	-4.57%	(21,813,499)	-4.54%	(22,425,409)	-4.55%	469,988,268
	TPIS - Accum.Dep.	464,439,028	403,062,960	353,326,417	(61,376,068)		(49,736,543)		(55,556,305)		378,194,689
	% Accum.Dep. of TPIS	84.06%	86.21%	88.08%							87.15%
	Avg. Plant Removal										-35,989,376
	Removal Factor										-1.21%

61 - 75%	Account	2011	2012	2013	Variance \$ 11-12	Variance % 11-12	Variance \$ 12-13	Variance % 12-13	Average Variance \$	Average Variance %	Average 2012-2013
	Depreciation Expense	242,217,922	233,780,898	227,644,371	(8,437,024)	-3.48%	(6,136,526)	-2.62%	(7,286,775)	-3.05%	230,712,635
	Accum. Depreciation	3,475,509,515	3,633,151,897	3,800,751,136	157,642,383	4.54%	167,599,239	4.61%	162,620,811	4.57%	3,716,951,516
	TPIS	4,808,093,586	4,902,143,453	5,030,115,035	94,049,866	1.96%	127,971,583	2.61%	111,010,725	2.28%	4,966,129,244
	Net Plant Invest.	1,387,007,466	1,324,934,945	1,285,866,532	(62,072,521)	-4.48%	(39,068,413)	-2.95%	(50,570,467)	-3.71%	1,305,400,739
	Loop Cost RRQ	908,306,242	881,546,331	863,530,266	(26,759,911)	-2.95%	(18,016,065)	-2.04%	(22,387,988)	-2.49%	872,538,299
	TPIS - Accum.Dep.	1,332,584,072	1,268,991,556	1,229,363,900	(63,592,516)		(39,627,656)		(51,610,086)		1,249,177,728
	% Accum.Dep. of TPIS	72.28%	74.11%	75.56%							74.85%
	Avg. Plant Removal										-68,091,824
	Removal Factor										-1.35%

26 - 50%	Account	2011	2012	2013	Variance \$ 11-12	Variance % 11-12	Variance \$ 12-13	Variance % 12-13	Average Variance \$	Average Variance %	Average 2012-2013
	Depreciation Expense	230,927,931	236,540,149	245,108,497	5,612,218	2.43%	8,568,348	3.62%	7,090,283	3.03%	240,824,323
	Accum. Depreciation	2,873,536,389	2,995,897,825	3,137,101,448	122,361,436	4.26%	141,203,624	4.71%	131,782,530	4.49%	3,066,499,836
	TPIS	4,710,017,539	4,839,804,655	4,978,010,426	129,787,116	2.76%	138,205,771	2.86%	133,996,443	2.81%	4,908,907,540
	Net Plant Invest.	1,891,031,725	1,903,220,567	1,898,067,694	12,188,842	0.64%	(5,152,873)	-0.27%	3,517,985	0.19%	1,900,644,131
	Loop Cost RRQ	906,638,481	912,920,187	921,786,425	6,281,706	0.69%	8,866,237	0.97%	7,573,972	0.83%	917,353,306
	TPIS - Accum.Dep.	1,836,481,150	1,843,906,830	1,840,908,977	7,425,680		(2,997,853)		2,213,914		1,842,407,904
	% Accum.Dep. of TPIS	61.01%	61.90%	63.02%							62.47%
	Avg. Plant Removal										-109,041,794
	Removal Factor										-2.19%

0 - 25% (Least Dep.)	Account	2011	2012	2013	Variance \$ 11-12	Variance % 11-12	Variance \$ 12-13	Variance % 12-13	Average Variance \$	Average Variance %	Average 2012-2013
	Depreciation Expense	199,975,617	210,634,587	215,097,306	10,658,971	5.33%	4,462,718	2.12%	7,560,844	3.72%	212,865,947
	Accum. Depreciation	1,747,193,733	1,763,032,125	1,859,912,703	15,838,392	0.91%	96,880,579	5.50%	56,359,485	3.20%	1,811,472,414
	TPIS	3,900,779,889	4,087,385,278	4,304,142,389	186,605,389	4.78%	216,757,111	5.30%	201,681,250	5.04%	4,195,763,834
	Net Plant Invest.	2,183,588,542	2,360,193,059	2,478,834,206	176,604,517	8.09%	118,641,146	5.03%	147,622,832	6.56%	2,419,513,832
	Loop Cost RRQ	778,744,796	817,338,646	840,942,215	38,593,850	4.96%	23,603,569	2.89%	31,098,710	3.92%	829,140,431
	TPIS - Accum.Dep.	2,153,586,156	2,324,353,153	2,444,229,686	170,766,997		119,876,532		145,321,765		2,384,291,420
	% Accum.Dep. of TPIS	44.79%	43.13%	43.21%							43.17%
	Avg. Plant Removal										-156,506,461
	Removal Factor										-3.84%

Notes:
(1) Based on HCL Algorithm

DOCKET NO.

10-90

Attachment A

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