Click! Asset and Expense Allocations

3/18/13

DRAFT

Summary

Rates, Planning & Analysis (RPA) along with staff members of Click! and Utility Technology Services (UTS) performed a study of the assets and expense allocations shared between Tacoma Power and Click!. The underlying need for the study was determined by the outdated allocations developed over 10 years ago when the Gateway program was being ramped up and a full Automated Metering Infrastructure (AMI) roll-out was expected in the near-term. The Click! and AMI landscape has changed significantly from that time resulting in a fundamental change in how assets and expenses should be allocated between Click! and Tacoma Power going forward. This comes at a critical point in Click!'s business lifecycle as a new strategy for this operating unit of Tacoma Power is being developed. Solid, baseline financials are needed in order to make prudent future business decisions. Below is a summary of our findings and recommendations:

- Tacoma Power should "own" all of the Hybrid Fiber Coaxial (HFC) plant shared between Tacoma Power and Click! up to the customer meter. Assets on the customer side of the meter used to deliver Click! service should be owned and funded by Click!. Although technically this is not a change from current practice, this philosophy of asset ownership should be clearly understood and communicated internally and externally. Click! should be considered a "user" of the HFC assets and be charged a usage fee accordingly (see next recommendation.)

- Click! should be charged a usage fee similar to a lease or rent for use of the HFC network. We recommend the "usage fee" be based on re-designing the Operating Expense allocation factors for three Cost Centers that directly support and maintain the HFC network. The split would be based on usage rather than the arbitrary 50%/50% or 100% splits as used currently. This includes Cost Center 555300 within Click! and Cost Centers 562700 and 562800 within the T&D Section of Tacoma Power. Further, we should move cost center 555300 inside of Tacoma Power to be consistent with 562700 and 562800. This recommendation is analogous to charging rent based on the maintenance cost to keep the asset operational. **The impact to the 2013/2014 budget would be an increase in Click! O&M by $2.9 million or $1.45 million per year.**

- Click! should bear the full cost of other O&M Expenses supporting the delivery of Click! services. The methodology used to determine the updated allocations of existing cost centers was based on contribution of labor to Tacoma Power or Click! applications. Many of the Cost Centers that are currently split 50%/50% or 100% Power are almost entirely functioning to support Click!

Service. **The impact to the 2013/2014 budget would be an increase in Click! O&M of $9.8 million or $4.9 million per year.**

- Tacoma Power continues to fund the HFC capital asset expansion for the sole reason of supplying Click! service. Although this practice fits into the Tacoma Power asset "ownership" paradigm, the business case for expansion of the coaxial cable and Click! Fiber portion of the HFC network should be fully transparent, i.e. that the only return is derived from Click! revenue. There is no near term plan to build out a larger scale AMI system that would leverage the HFC network.

- Click! should not include depreciation expense on any of the HFC Network, all HFC depreciation should be accounted for by Tacoma Power. Click! should only track depreciation on assets such as set-top boxes, testing equipment, Hub Electronics, and other assets used solely for serving Click! customers. **The impact to this recommendation is unknown at this point. Follow-up work is needed to determine the impact to retail rates if any.**

- Additional work is needed to determine the Power retail rate impacts of changing the asset allocation between Click! and Power. Increasing the Power asset by the historical base cost of the HFC network that is currently considered Click! asset base would most likely shift a higher percentage of the rates to be paid by the Residential customer class since it would be considered Distribution.

- Tacoma Power should review the future need for Data Conduit Requirements that are included in the Customer Requirements for Commercial Secondary Service. Data Requirements state that the data conduit system shall be installed wherever electrical power conduits are being installed. The data conduit requirements were established when a full AMI roll-out to the service territory was expected.

Summary of Financial Impact to Click! If Recommendations Were Implemented

as of 11/30/2012				Current Methodlogy		Recommended	
All $'s in 1000's	**2012 Budget**	**2012 Actual**	**2012 Diff.**	**2013**	**2014**	**2013**	**2014**
Commercial Operating Revenue							
CATV	$19,846	$16,053	($3,792)	$19,403	$19,540	$19,403	$19,540
ISP	4,743	4,970	227	5,592	6,890	5,592	6,890
Broadband	941	1,379	439	1,297	1,444	1,297	1,444
Other	666	2,326	1,661	690	634	690	634
Total Commercial Operating Revenue	**$26,195**	**$24,729**	**($1,466)**	**$26,982**	**$28,508**	**$26,982**	**$28,508**
Total Commercial Operating Expenses	**$19,553**	**$18,305**	**($1,248)**	**$19,217**	**$19,421**	**$25,708**	**$25,589**
Earnings before Int., Taxes, Dep, & Amort. (EBITDA)	**$6,642**	**$6,424**	**($218)**	**$7,765**	**$9,087**	**$1,274**	**$2,919**
Taxes	$3,576	$3,557	($19)	$3,724	$3,843	$3,724	$3,843
Depreciation and Amortization*	5,847	5,847	(6,933)	5,945	5,945	5,945	5,945
Net Income (no interest allocated)	**($2,781)**	**($2,980)**	**$6,734**	**($1,904)**	**($700)**	**($8,395)**	**($6,868)**
**Note more work is needed on the assets to determine recommended Depreciation*							
Cash Flow Reconciliation							
plus Depreciation and Amortization	$5,847	$5,847	$0	$5,945	$5,945	$5,945	$5,945
less Commercial Capital Paid from Current Fund	4,094	3,219	(875)	2,200	2,200	2,200	2,200
Net Cash Flow - Commercial	**($1,029)**	**($352)**	**($875)**	**$1,841**	**$3,044**	**($4,650)**	**($3,124)**

Background

RPA was asked to investigate and document Tacoma Power's methodology for allocating assets and expenses between Click! and Tacoma Power and recommend changes based on its findings. Although Click! is an operating unit of Tacoma Power and its financial statements are shown on a consolidated basis, Click! needs to be understood and managed as a stand-alone business. This determination is very complex given that the genesis of the Click! business model was to utilize Tacoma Power infrastructure originally put in place to support future Tacoma Power AMI. The decision to sell Cable TV and Internet services was based on bringing in additional revenues. The additional infrastructure needed to sell Cable TV and Internet services was minimal and it was assumed this additional infrastructure would be paid off quickly with the additional anticipated Click! revenues.

A brief History of Click!/Tacoma Power Allocations

In April 2000, PriceWaterhouseCoopers, an external consulting firm, performed a review of Click! Network's financial performance[1]. One of the recommendations that emerged from the review was that Click! separate its capital and operating costs into Commercial (i.e. Click!) and Power (i.e. Tacoma Power) service categories. This cost segregation would better enable policy makers to judge performance of Click!.

On August 26, 2002, Dana Toulson, Tacoma Power Telecommunications Manager, responded in an email to the Tacoma Power Audit Team with the results of an effort to address the allocation concern and outlined a methodology to determine Capital Investments and Allocations of Operating Expenses[2].

[1] Click! Network Financial Performance Review, PriceWaterhouseCoopers, April 24 2000

[2] See Email dated August 26, 2002 from Dana Toulson, Telecommunications Manager, to Tacoma Power Audit Team

"To allocate total capital investment and estimate depreciation for the two business categories, each of the thirty-two Telecommunications Project work orders were evaluated to determine their commercial and power related portions. The team asked itself "Would these investments have been made if Tacoma Power was not offering Cable TV, Internet or other commercial broadband services?" If the answer was no, the investment costs were allocated to Commercial Applications."

Based on this test, the team determined that approximately 27.4%/72.6% of the total $85.8 million initial investment in Click!/Power Telecomm assets should be allocated to Click!/Power respectively. This is the split that determined depreciation expense on the initial investment for Click! and Power.

Further, starting in the 2001/2002 Biennium, all work orders were designated either Commercial or Power under the framework that Power owned all assets up to the Customer Meter, and Click! owned all assets on the customer side of the meter (and set-top boxes and other obvious capital equipment). ***This is still the asset allocation methodology used today.***

In the same email from Dana Toulson, the results of the Operating Expense Allocation were provided. The team performed the same test on the "Org" (i.e. 5511, 5532, etc) to determine the split. Orgs were split either 100% or 50%/50% between Click! and Tacoma Power. It was recognized at the time that the methodology would not always be perfect but it was reasonably reflective of Commercial and Power costs and had the advantage of being easy to administer and track.

In 2003, Click! hired external consulting firm Virchow Krause & Company to assess the reasonableness of the Capital and Operating Expense Allocations[3]. Virchow Krause applied a Net Present Value of AMI costs and benefits attributable to the HFC network to determine the asset allocation scheme. In general, the hybrid fiber (Fiber) portion of the network and the 97% of the coaxial cable (Coax) portion of the network costs were determined to be Power's assets. Overall, the report supports the existing asset allocation split (26%/74%) and also supports the Operating Expense split.

In summary, what is left is a general split of the initial investment from 1997-2000 being 27.4% Click! and 72.6% Power for purposes of calculating depreciation. Further, starting in 2001 until present, all assets that were purchased or developed up to the customer meter are considered Power's and considered Click!'s if they are on the customer side of the meter (or clearly belong to Click! like Set to Boxes, etc.). Further, the Operating Expense allocation is the same scheme as developed in 2002, Orgs are either 100% or split 50%/50% between Power and Click! based on their work function at that time.

[3] See "Review of Cost Allocations For Click! Network Tacoma Power", Virchow Krause & Company July 23, 2003

Asset Study

The main purpose of the asset study was to help inform the recommended expense allocations. We have not completed a comprehensive review of the assets at this time to determine whether they should be a Click! or a Power asset. This is an important next step as it would have a material effect on how the power rates are allocated across the customer classes. Adding HFC Asset Base to Tacoma Power's rate model would most likely increase the proportion of rates paid by the Residential customer class since it would be considered Distribution.

The first step in this exercise was to obtain a full listing of the Fiber/Coax system infrastructure and understand how it is currently split between Click! and Tacoma Power. The data was separated into understandable categories in order to facilitate discussion. There are some issues with the data and accounting classifications have changed over time, but overall it was deemed sufficient for this exercise. Below is the breakout that was used:

Row Labels	Historical Cost - Comm.	Historical Cost Pwr.	Book Value - Comm.	Book Value Pwr.
Coax	14,781,385	87,373,426	3,667,421	43,171,879
Fiber	1,995,061	7,458,972	560,397	3,026,195
HTU/Converter-Descrambler_HTU/Converter-Descrambler	17,728,326	1,752,854	4,536,495	-
Capital Connect	5,732,630	5,776,209	3,864,838	2,648,467
Sonet Equipment	5,081,400	2,064,760	1,809,290	523,121
Sonet Construction	3,004,760	4,713,587	1,503,851	2,051,205
MDU	1,460,282	5,267,545	457,035	1,973,418
Head End Equipment	3,557,380	826,517	1,952,574	577,117
Land and Structures_Hub Electronics	5,746,817	6,197,580	1,178,652	930,850
Land and Structures_Hub Labor/Assembly	1,922,189	1,218,434	1,602,467	989,303
Immaterial	7,068,627	9,625,484	1,499,917	1,299,457
Grand Total	**68,078,857**	**132,275,367**	**22,632,938**	**57,191,012**

Note that overall, there is approximately $200 million in historical cost and approximately $80 million in book value of the Fiber/Coax system today. The initial capitalization date was around 1999 and certain parts of the system are still being added today. The "immaterial" classification includes several asset classes, mostly capitalized in the late 1990's or early 2000's.

A more detailed description of the assets by year of capitalization are as follows:

Row Labels	Historical Cost - Comm	Historical Cost - Pwr	Book Value - Comm	Book Value - Pwr
Coax				
1999	13,502,992	35,778,001	3,069,398	8,132,784
2001	250	662	84	223
2003	49,478	1,888,021	23,090	882,548
2004	1,228,665	16,748,029	574,849	8,691,174
2006	-	3,425,492	-	2,283,965
2007	-	20,159,527	-	14,850,820
2008	-	6,393,079	-	5,043,078
2009	-	2,018,391	-	1,749,272
2010	-	982,224	-	898,076
2011	-	-	-	639,938
Fiber				
1999	1,708,702	4,527,438	430,870	1,141,648
2000	1,237	3,278	342	905
2001	547	1,448	184	489
2003	(45,443)	106,103	(28,341)	30,774
2004	330,018	1,141,538	157,342	590,850
2007	-	1,227,042	-	899,831
2008	-	452,124	-	361,699
HTU/Converter-Descrambler_HTU/Converter-Descrambler				
1999	604,108	1,600,665	-	-
2003	5,222,363	-	-	-
2004	265,912	152,189	-	-
2007	7,984,405	-	1,596,881	-
2009	469,217	-	281,530	-
2010	3,182,321	-	2,545,925	-
2011	-	-	112,158	-
Capital Connect				
1999	833,619	2,208,787	225,710	598,048
2003	936,842	936,842	495,721	495,721
2004	546,570	851,826	255,981	399,004
2005	1,023,257	1,091,440	607,409	650,665
2007	953,649	687,315	703,933	505,030
2008	5,868	-	4,695	-
2009	879,997	-	762,664	-
2010	552,829	-	515,973	-
2011	-	-	292,753	-
Sonet Equipment				
1999	589,892	1,562,998	148,096	392,401
2000	144,134	381,903	41,040	108,742
2002	466	1,234	191	507
2003	1,162,721	111,314	7,196	19,064
2004	2,571,798	7,311	1,200,731	2,408
2006	222,445	-	0	-
2008	6,428	-	2,571	-
2009	234,656	-	140,794	-
2010	148,061	-	119,089	-
2011	-	-	149,583	-
Sonet Construction				
1999	488,730	1,294,956	205,605	544,778
2000	73,411	194,512	27,420	72,653
2001	7,291	19,319	2,599	6,885
2002	544,966	1,443,960	223,706	592,950
2003	34,645	1,167,384	16,168	544,779
2004	1,151,856	593,455	554,164	289,159
2006	667,344	-	444,896	-
2008	36,518	-	29,214	-
MDU				
1999	998,368	2,645,311	261,766	693,583
2000	163,631	433,562	48,194	127,696
2001	9,046	23,967	2,701	7,156
2003	5,277	606,760	2,463	283,155
2004	283,961	978,211	141,913	463,631
2006	-	403,576	-	269,051
2007	-	176,158	-	129,147
2008	-	-	-	-
Head End Equipment				
2004	15,062	-	-	-
2008	1,168,640	459,640	388,687	262,651
2009	1,536,004	-	847,145	-
2010	837,674	366,877	716,742	314,466
Land and Structures_Hub Electronics				
1999	1,572,954	4,167,755	-	-
2003	839,211	324,050	1,099	2,913
2004	1,423,963	356,653	-	-
2007	-	521,414	-	193,504
2008	999,476	17,832	399,790	7,133
2009	493,861	249,475	296,328	149,685
2010	417,332	560,402	416,794	448,322
2011	-	-	64,640	129,294
Land and Structures_Hub Labor/Assembly				
1999	55,105	146,007	-	-
2003	322,798	239,797	171,125	126,488
2004	1,862	3,307	990	1,523
2007	-	334,221	-	62,113
2008	817,752	-	654,202	-
2009	405,629	153,249	351,545	132,816
2010	319,044	341,853	394,523	319,063
2011	-	-	30,083	347,301
Immaterial				
1999	2,233,231	6,032,018	238,007	630,631
2001	5,294	14,028	-	-
2003	1,206	104,019	352	933
2004	784,773	263,866	(19,879)	1,106
2005	707,926	-	74,071	-
2006	1,093,615	1,555,577	23,018	0
2007	1,115,350	171,606	232,617	35,431
2008	421,698	1,396,838	185,528	578,389
2009	213,311	85,292	179,251	51,176
2010	492,223	2,239	456,525	1,791
2011	-	-	130,427	-
Grand Total	**68,078,857**	**132,275,367**	**22,632,938**	**57,191,012**

Coaxial Cable

The coaxial cable infrastructure is the bulk of the cost of the HFC network. The Coax runs from the Click! node. The Click! node, is connected to the Fiber Ring with coax extended from the node by amplification and splitting to the service "Tap" where coaxial cable (coax) drops extend the system to individual residences and businesses. Coax is necessary for Click! CATV and High-Speed Internet Services. It is also necessary for backhaul of meter data for AMI. Currently, Tacoma Power owns and pays for all Coax infrastructure maintenance and capital investment for replacements, and for new services. Click! Commercial has not been allocated any Coax since the initial overall 27/73 split was applied to all assets in the early 2000's. Note also that the Coax build-out has slowed considerably in the last few years as can be seen in the chart above.

It is important to understand that there are only 18,000 two-way meters in the Gateway program that are actively using the Coax assets to transmit meter data. However, since it is understood that Tacoma Power will be installing two-way meters throughout its service territory at some point in the future, Power continues to pay for all capital costs up to the meter, and O&M costs to support the asset which is 100% of the capital and maintenance cost of the Coax asset. This issue is particularly acute when new customers request Click! services where there is not currently Coax to the house. Power pays for all the trenching and other costs to enable Click! service to the house, even though there is no intention of using the Coax for meter data any time in the near future.

Although the Coax build-out has slowed in recent years, there has been about $30 million spent and capitalized as Coax within the last 5 years, and about $50 million since 2004. O&M costs and Personnel expenses related to supporting the Coax is recognized in Cost Center (555300) for Click!, and two cost centers located in the T&D Section (562700 & 562800). Please see the Expense Study Section of this paper for the recommendation to change the allocation.

Fiber

The Fiber ring that runs from the Headend ties all of the substations together, and connects all the Click! Distribution Hubs, is currently considered Power's asset and all maintenance/replacement costs of the Fiber ring is allocated to Tacoma Power. Power is using this asset currently for many Distribution/SCADA operations and will continue to do so in the future. There are unused Fiber strands and then there are Fiber networks such as the PCON, I-Net, HFC, SONET, and Carrier Ethernet.

Fiber is considered a "passive" asset and does not require proactive maintenance and is thus relatively inexpensive to maintain. Currently two cost centers located in the T&D Section (562700 and 562800) support the Fiber and Coax asset, as well as other infrastructure such as service drops and vaults. Please see the Expense Study Section of this paper for the recommendation to change the allocation.

Capital Connect

This asset class is comprised mostly of capitalized labor of all related installation services of Click! to the home. The installation costs include the wires and capitalized labor included in connecting the house

wires to the “demarcation” point where the “inside” meets the “outside” of the meter. Based on the data above, it appears that Capital Connect costs are being correctly allocated to the Click! asset base. However, on the expense side to support this effort, Cost Center 553500, Service Installation, which is comprised of approximately 24 Click! employees is being allocated 50% to Power and 50% to Click!. The reason this was originally split in this way was the Installation Group was installing Gateway meters as well as Click! service. Now there are very few Gateway installations given the program is not being expanded. Please see the Expense Study Section of this paper for the recommendation to change the allocation.

SONET Equipment

SONET Equipment is for the sole purpose of transporting Click! data across the Fiber. For that reason, all SONET Equipment should be capitalized as a Click! asset and all maintenance/support costs for this equipment should be allocated to Click!. Note also that there is an Asset class called “Sonet” above. Per discussion with Click! engineers, this is most likely more representative of Fiber. In the early stages of building the infrastructure, the accounting classifications were most likely not appropriate and attempted to be too granular. Most of the “Sonet” asset was trenching in order to lay the Fiber in the ground (for which the SONET equipment would leverage). All SONET Equipment and SONET has been allocated to Click! since 2004, which appears reasonable.

SONET Construction

Per discussion with Click! this cost accounting does not appear to be used anymore. It is thought that the costs that used to map to this activity are now captured in the Fiber asset. No further work was done on this asset class.

Multiple Dwelling Units (MDU)

Per discussion with Click! this cost accounting does not appear to be used anymore. It is thought that the costs that used to map to this activity are now captured in the Fiber asset. No further work was done on this asset class.

Headend Equipment

Most of the equipment in the Headend is used for Click! video content for Commercial operations. The data center houses applications to monitor and troubleshoot the HFC Network and Commercial Services offered by Click!. Cost Center 555500, Click! Network Engineering, supports this work and is currently allocated 100% to Power. Please see the Expense Study Section of this paper for the recommendation to change the allocation.

Land and Structures_Hub Electronics

This represents Hub buildings: Northwest, Northeast, Southwest, Southeast, Downtown North and Downtown South. The equipment in the hubs is used to deliver CATV, High Speed internet, Ethernet and SONET services and is primarily used for Commercial operations. Cost Center 555300, Network

Operations and cost center 555400, Broadband Services supports the work performed in these six hub buildings. Please see the Expense Study Section of this paper for the recommendation to change the allocation.

Land and Structures_Hub Labor/Assembly

This breakout represents labor to install the equipment at the hub buildings: Northwest, Northeast, Southwest, Southeast, Downtown North and Downtown South.

Expense Study

After the team obtained an understanding of the asset base the O&M cost centers were studied. The purpose of this exercise was to determine a "usage" fee for the Cost Centers that support and maintain the HFC network and to ascertain the true cost to run the Click! business by examining the remaining Cost Centers.

		Allocation Factor Summary				Projected 2013/2014 Expenses					
		Old		New		Old Allocation		New Allocation		Difference	
Cost Center	Description	Comm.	Pwr.	Comm.	Pwr	Comm.	Pwr.	Comm.	Pwr.	Comm.	Pwr.
HFC Network Support											
555300	Click Network Oper	0%	100%	56%	44%	$ -	$ 2,965,634	$ 1,673,646	$1,291,988	$ 1,673,646	$ (1,673,646)
562700	PwrT&D HFC NtwrkCnst	0%	100%	56%	44%	$ -	$ 1,607,885	$ 907,405	$ 700,480	$ 907,405	$ (907,405)
562800	PwrT&D HFC Ntwrk Eng	0%	100%	56%	44%	$ -	$ 516,393	$ 291,424	$ 224,968	$ 291,424	$ (291,424)
Customer Installation Support											
553500	Click Svc Install	50%	50%	100%	0%	$ 2,769,997	$ 2,769,997	$ 5,539,994	$ -	$ 2,769,997	$ (2,769,997)
553200	Click Tech Op Admin	50%	50%	86%	14%	$ 343,805	$ 343,805	$ 590,753	$ 96,857	$ 246,948	$ (246,948)
553600	Click Dispatch	100%	0%	100%	0%	$ 983,500	$ -	$ 983,500	$ -	$ -	$ -
Network Services											
555400	Click Broadband Svcs	50%	50%	99%	1%	$ 1,222,868	$ 1,222,868	$ 2,421,278	$ 24,457	$ 1,198,410	$ (1,198,410)
555500	Clk!Ntwk Engineering	0%	100%	95%	5%	$ -	$ 1,350,400	$ 1,282,880	$ 67,520	$ 1,282,880	$ (1,282,880)
555600	Click Net Svc Assur	0%	100%	95%	5%	$ -	$ 1,899,167	$ 1,804,208	$ 94,958	$ 1,804,208	$ (1,804,208)
Admin/IT Cost											
551100	Click Admin	50%	50%	95%	5%	$ 1,409,103	$ 1,739,328	$ 3,005,113	$ 143,317	$ 1,596,010	$ (1,596,010)
552200	Click Mkt Admin	100%	0%	100%	0%	$ 2,433,826	$ -	$ 2,433,826	$ -	$ -	$ -
552100	Click MrktBusOpsAdm	100%	0%	100%	0%	$ 399,491	$ -	$ 399,491	$ -	$ -	$ -
552600	Click Busns Sys	50%	50%	100%	0%	$ 888,323	$ 888,323	$ 1,776,647	$ -	$ 888,323	$ (888,323)
Other (Unchanged)											
552300	Click Marketing Svc	100%	0%	100%	0%	$ 31,466,262	$ -	$ 31,466,262	$ -	$ -	$ -
552400	Click ISP Adv	100%	0%	100%	0%	$ 524,000	$ -	$ 524,000	$ -	$ -	$ -
552500	Click Cust Sales	100%	0%	100%	0%	$ 2,850,440	$ -	$ 2,850,440	$ -	$ -	$ -
553700	Click Converter Inv	100%	0%	100%	0%	$ 913,340	$ -	$ 913,340	$ -	$ -	$ -
Total		**75%**	**25%**	**96%**	**4%**	**$ 46,204,956**	**$15,303,799**	**$ 58,864,208**	**$2,644,547**	**$12,659,252**	**$ (12,659,252)**

A description of the Cost Centers and support for the recommended changes are as follows:

HFC Support (555300, 562700, 562800) – All three of these cost centers support and maintain the HFC plant. It is unclear why Cost Center 562800 (HFC Engineering and Design) and 562700 (HFC Construction and Maintenance) were positioned inside of the T&D Group and 555300 (HFC system performance maintenance and testing) was positioned under Click! (and allocated 50% to Power). However, the purpose of each cost center is similar in that they maintain the operations of the HFC plant which includes engineering, design, conversion work, safety equipment, repairs, Operating supplies, etc to keep both the Fiber and Coax assets running as intended.

As discussed in the summary of this paper, it was agreed that the ownership structure for the HFC plant is that Power is considered to "own" all of the assets and Click! is a user of those assets to deliver its service. The usage "fee" that we propose is equivalent to Click!'s portion of the maintenance of the asset based on a set of allocators. In order to determine this "fee" we first allocated the cost of the Fiber portion based on the Fiber count of Click! and Power applications and then allocated the cost of the Coax portion based on customer count of Click! and Power (Gateway). In order to put this overall

allocation scheme into context, it is analogous to a homeowner charging rent to tenants based on maintenance cost of the house only. Note all expenses used for this allocation were based on 2012 actual amounts.

Fiber Allocation

The methodology used to recalculate the allocations was to first separate the costs for the Fiber portion and Coax portion of the assets based on miles of each.

	Miles	% of Total
Miles_Fiber	527	27%
Miles_Coax	1,400	73%
Total	1,927	100%

Each respective percentage was then multiplied by the base 2012 total cost of the three cost centers to assign a total cost to maintain the Fiber and Coax asset respectively.

2012 Total Cost 562700, 562800, 555300	$2,643,601
Cost Allocated to Fiber (x 27%)	$ 723,047
Cost Allocated to Coax (x 73%)	$1,920,554
2012 Total Cost 562700, 562800, 555300	$2,643,601

The next step was to allocate the Fiber and Coax to Power and Click respectively. For the Fiber portion of the cost, the Fiber Count for all of the Plant was used. For Click! the portion of the Fiber used was based on the Broadband Services (BBS), and for the Click! Network, the remainder of the Fiber was assumed to be for Power (Dark, City-Net, PASS, AMR-Gateway).

The Fiber count is broken out as follows:

	Fiber Count	% of Total
BBS	307	10%
Click! Network	547	19%
Total Click Fiber	**854**	**23%**
Dark	1,904	65%
City-Net	594	20%
PASS	396	14%
AMR/Gateway	38	1%
Total Power Fiber	**2,932**	**77%**
Total Fiber Count	**3,786**	**100%**

When aggregated into the Click! and Power Fiber as described above, the allocation to Click! and Power applied to the 2012, Cost Allocated to Fiber is as follows:

Click! Fiber Allocation (%)	23%	$ 162,838
Power Fiber Allocation (%)	77%	$ 560,209
Total	100%	$ 723,047

Coax Allocation

For the Coax asset, the allocation was based on customer count of Click! and Gateway users as shown in the table below.

	Customer Count	**%**
Cable Customers	22,983	39%
ISP Customers	17,753	30%
Click! Total	40,736	69%
Gateway Customers	18,129	30.8%

When applied to the 2012 Cost Allocated to Coax, the Coax cost is allocated to Click! and Power as shown in the table below. :

	%	**$**
Click! Coax Allocation	69%	$ 1,329,069
Power Coax Allocation	31%	$ 591,484
Total	100%	$ 1,920,554

In total, the sum of the Click! costs for Fiber and Coax results in an allocation that is 56% Click! and 44% Power across the three cost centers as shown in the table below.

	$	**%**
Click Total Fiber/Coax	$1,491,908	56%
Power Total Fiber/Coax	$1,151,693	44%
Total	$2,643,601	100%

Customer Installation Support

553500 Click Svcs Install – The Service Install cost center is primarily the labor and supplies needed to physically hook the customer up to the meter for Click! services. When Gateway was being expanded some installs were for Gateway meters and some were for Click! services, and is most likely the cause for the original 50%/50% split. As the Gateway population is now almost static, all of this group's time and resources are for Click! services and supports a change to allocate 100% of this Cost Center to Click!.

553200 Click Tech Op Admin – The Click! Tech Op Admin cost center is primarily service technician management labor and support staff. Very little time from this group of employees is spent on projects that benefit Power only, however, it was difficult to ascertain the amount that may be spent on Power applications. As such, the methodology we used to determine the allocation was to use the total

overall average of the operational cost center re-calculated allocation. The operational cost centers were determined to be all cost centers except for the Administration. A straight average was used.

Network Services

555400 – Click Broadband Svcs - Based on interviews with Click! staff, two employees in this cost center work in the ISP team that configures, provisions and maintains the cable modem termination systems (CMTS). They estimate they spend less than 2% of their time working on support of the Gateway cable modems. Duties include Gateway cable modem priorities, Pay as you Go and support of approximately 25 Tacoma Power Commercial accounts and the incidental work being performed on maintaining and upgrading the Click! internet product. Other work consists of confirming that DNS entries are correct, supporting questions from UTS regarding Gateway modems, and supporting installation of new Tacoma Power Commercial account cable modems. As this cost center is made up of seven employees, and given the fact that two of the employees within this cost center spend less than 2% of their time on Gateway applications, the overall time spent supporting Tacoma Power was estimated to be 1% overall for this cost center.

555500 – Clck!Ntwrk Engineering – Based on interviews with employees in the Cost Center, very little of their time is spent Engineering the network for the benefit of Tacoma Power or Gateway. One of the three Engineers, the Internetworking Engineer is responsible for the design, performance and capacity requirements of the ISP routed network which includes the CMTS, a small amount of time of which supports the Gateway program. The other two engineers, Video and Broadband Services Engineer spend all their time planning, designing and maintaining their networks to support the commercial CATV and Broadband Services products.

555600 – Click Net Svcs Assurance – Based on interviews employees in this cost center it is estimated they spend less than 5% of their time working on support of the Gateway Cable Modems. It is estimated that 40% of the NSA's (Network Service Assurance) time is spent on monitoring CATV, high speed internet, Ethernet and SONET services. A portion of that 40% is dedicated to monitoring and support of the Gateway cable modems. Monitoring includes the incidental monitoring of the Gateway cable modems along with the monitoring of Click retail cable modems. A system cable modem outage would affect the Gateway cable modems and as part of the reporting process would include an email sent to UTS notifying them of the outage event. The NSA sends out network status updates and planned maintenance notifications as well, which the UTS receives. The NSA indirectly monitors the physical infrastructure, Fiber and Coax which Tacoma Power owns. The devices monitored which are connected to the Fiber and Coax are lasers, receivers, nodes, amplifiers, HFC power supplies, cable modems, Ethernet switches and SONET multiplexers.

Admin/IT Cost

551100 Click Admin – The Click! Admin cost center is primarily the Section Manager and support staff and office supplies for Click!. Very little time from this group of employees is spent on non-Click! projects that benefit Power only. The methodology used to determine the allocation was the total recalculated Click! allocation from all of the cost centers above.

552600 Click Busns Sys – This cost center consists of the financial and IT group within Click! comprised of approximately 4 FTEs. Based on discussions and interviews with the manager of this group, very little time is spent on matters pertaining to Power only. For this reason, it was determined that 100% allocation to Click! was more appropriate than an arbitrary 50%/50% split between Click! and Power. When the Gateway program was being developed and the 50%/50% split was created, these employees were more involved in integrating 2-way metering data and financial planning for an AMI type environment.