

**AGREEMENT NO. FO-741-02/2014
OPTICAL FIBER LEASE AGREEMENT
BETWEEN
THE DEPARTMENT OF WATER AND POWER OF LOS ANGELES
AND
NBC UNIVERSAL, INC.**

This OPTICAL FIBER LEASE AGREEMENT NO. FO-741-02/2014 (hereinafter referred to as the "Master Agreement") made and entered into between the CITY OF LOS ANGELES, a California municipal corporation, acting by and through the DEPARTMENT OF WATER AND POWER (hereinafter referred to as the "LADWP" or "CITY OF LOS ANGELES") having its principal office at 111 North Hope Street, Los Angeles, California 90012, and NBC Universal, Inc. (hereinafter referred to as "NBC UNIVERSAL" or "CUSTOMER"), with its principal office at 100 Universal City Plaza, Universal City, California 91608-1002 (hereinafter referred to as "CUSTOMER"), which are sometimes referred to individually as "Party" and collectively as "Parties."

WHEREAS, the LADWP owns, maintains, operates, and controls an optical fiber cable system (hereinafter referred to as the "CABLE SYSTEM") throughout the City of Los Angeles, State of California;

WHEREAS, a portion of the LADWP's CABLE SYSTEM is not presently needed for LADWP purposes and any grant of a lease or license will not interfere with its operations;

WHEREAS, the CUSTOMER has an interest in obtaining an indefeasible right of use in one or more segments of the LADWP's CABLE SYSTEM for the provisioning of telecommunication services, including telephone, data, and video services;

WHEREAS, LADWP is willing to grant an indefeasible right of use to CUSTOMER and permit CUSTOMER's use of certain other property owned and/or controlled by LADWP including, without limitation, innerduct, conduit, building entrance facilities and associated appurtenances; and

WHEREAS, in conjunction with this Master Agreement, the Parties shall enter into one or more Short Form Indefeasible Right of Use Lease Agreements that set forth the terms and provisions of each lease of optical fiber strands at specific locations (hereinafter referred to collectively or separately as the "Short Form IRU Lease Agreement" or "IRU") and each Short Form IRU Lease Agreement shall be made a part of this Master Agreement and incorporated by reference herein, regardless of the date that each IRU was executed.

NOW, THEREFORE, in consideration of all terms, conditions and obligations set forth in this Master Agreement and each related Short Form IRU Lease Agreement, the Parties mutually agree and covenant as follows:

1.0 DEFINITIONS

The following terms, whether used in the singular or the plural, when used in this Master Agreement and initially capitalized, shall have the meaning specified below:

1.1 Acceptance Date. "Acceptance Date" has the meaning ascribed in Section 5.1.

1.2 Acceptance Letter. "Acceptance Letter" has the meaning ascribed in Section 5.1.

- 1.3 Acceptance Period. "Acceptance Period" has the meaning ascribed in Section 5.1.
- 1.4 Acceptance Testing. Formal testing undertaken by LADWP to evaluate the successful operation and/or performance of the optical fiber transmission line or optical communication system which shall become a part of the CUSTOMER SYSTEM to be leased to CUSTOMER, in accordance with the operation requirements and test measurements identified in the applicable IRU.
- 1.5 Agreement or "Master Agreement". This Optical Fiber Lease Agreement.
- 1.6 Affiliates. Any person or entity, which directly or indirectly controls, is controlled by, or is under the common control of the applicable Party to this Master Agreement.
- 1.7 Anticipated Completion Date. "Anticipated Completion Date" has the meaning ascribed in Section 5.2.
- 1.8 Associated Property. Any tangible and intangible property required for the operation and use of a Party's optical fiber CABLE SYSTEM.
- 1.9 CABLE SYSTEM. A communication system owned by LADWP which is comprised of optical fiber cables throughout its facilities, designated areas, associated property and interrelated connections and has the capability of transmitting sizeable amounts of information.
- 1.10 Chronic Failure. "Chronic Failure" has the meaning ascribed in Section 14.6.
- 1.11 Communications Transport Service or CTS. The provisioning of a fiber optic network system for transmitting and receiving digital signals and/or video streams of information.
- 1.12 CUSTOMER SYSTEM. Any and all optical fiber strands, innerducts, conduits, building entrance facilities and associated appurtenances; colocation space, auxiliary power and standby generator capacity; and space on building tops, towers, and other structures made available by LADWP to be leased to CUSTOMER under the terms of this Master Agreement, any applicable IRU and associated rights to access such space and fiber strands at demarcation points as specified in each IRU for the purpose of installing wireless communications antennas and Associated Property.
- 1.13 Dark Fiber. An unequipped fiber optic strand without any electrical or optical transmission equipment attached at either end of the strands.
- 1.14 Delivery. The particular strands and/or segment of fiber leased by CUSTOMER from LADWP.
- 1.15 Demarcation Point. The point at which the CABLE SYSTEM and/or CUSTOMER SYSTEM and any Associated Property under the LADWP's ownership and control interface with the equipment and fiber CABLE SYSTEM under the CUSTOMER's ownership and control, whereupon each Party assumes full responsibility, on its respective side of such demarcation, for the installation, costs, maintenance, reliability, and any liability arising from its ownership, control, and operation of its individual fiber CABLE SYSTEMS, connections, and equipment.
- 1.16 Disclosing Party. "Disclosing Party" has the meaning ascribed in Section 22.0.

- 1.17 Effective Date. "Effective Date" has the meaning ascribed in Section 2.1.
- 1.18 Emergency Maintenance. "Emergency Maintenance" has the meaning ascribed in Section 4.2.1.
- 1.19 End User. "End User" is any individual, corporation, limited liability company, limited liability partnership, government agency or other entity that subscribes or receives (directly or indirectly) any intrastate or interstate services from CUSTOMER.
- 1.20 Expected Delivery Date. "Expected Delivery Date" is the date that LADWP expects to deliver the fiber optical strands identified within a particular IRU.
- 1.21 Extended Anticipated Completion Date. "Extended Anticipated Completion Date" has the meaning ascribed in Section 5.2.
- 1.22 False Call Outs. "False Call Outs" has the meaning ascribed in Section 4.2.1.
- 1.23 Indefeasible Right of Use or "IRU". CUSTOMER's exclusive right to use the segment(s) of the CABLE SYSTEM and/or CUSTOMER SYSTEM as designated under the terms of this Master Agreement and any applicable Short Form IRU Lease Agreement for the term specified within the given Short Form IRU Lease Agreement, subject to the limitations set forth in Section 2.2 herein.
- 1.24 Indemnitor. "Indemnitor" has the meaning ascribed in Section 20.0.
- 1.25 Indemnitee. "Indemnitee" has the meaning ascribed in Section 20.0.
- 1.26 Insurance Requirements for Construction. "Insurance Requirements" has the meaning ascribed in Section 19.0.
- 1.27 Notice of Default. Any written notice issued by LADWP to CUSTOMER which announces that CUSTOMER is in default pursuant to one or more subsections of Section 13.0.
- 1.28 Proprietary Information. "Proprietary Information" has the meaning ascribed in Section 22.0.
- 1.29 Recipient Party. "Recipient Party" has the meaning ascribed in Section 22.0.
- 1.30 Scheduled Maintenance. "Scheduled Maintenance" has the meaning ascribed in Section 4.2.3.
- 1.31 Short Form IRU Lease Agreement or IRU. Any applicable Short Form IRU Lease Agreement entered between LADWP and CUSTOMER which arise from and consequently are limited by the terms and conditions of this Master Agreement as stated herein.
- 1.32 Taxes. "Taxes" shall have the meaning ascribed in Section 3.1.
- 1.33 Term. "Term" shall have the meaning ascribed in Section 2.1.
- 1.34 Termination Settlement Charges. Any and all payments owed by CUSTOMER to LADWP in accordance with IRU Exhibit B of each applicable Short Form IRU Lease Agreement for early termination of any said agreement, including those charges ascribed in Section 14.10.3.

2.0 TERM

2.1 Term of Master Agreement. This Master Agreement shall become effective on May 5, 2014 (the "Effective Date") and shall continue in effect for Fifteen (15) years ("Term"), unless sooner terminated in accordance with the terms of this Master Agreement. The term of each related Short Form IRU Lease Agreement and any renewal or extension terms thereof shall be set forth in the applicable Short Form IRU Lease Agreement for each portion of the CUSTOMER SYSTEM, provided that, the term of any related Short Form IRU Lease Agreement shall not exceed the term of this Master Agreement, as may be amended from time to time.

2.2 Limitations on Short Form IRU Lease Agreements. Each Short Form IRU Lease Agreement that is subject to this Master Agreement shall be numbered in consecutive order, and shall be subject to and limited by all of the terms and conditions of this Master Agreement.

In the event that the Parties execute one or more Short Form IRU Lease Agreements subsequent to the execution of this Master Agreement, the initial term or cumulative terms (including renewals) of each Short Form IRU Lease Agreement shall not exceed the Term of this Master Agreement, regardless of the date that any of the IRUs were entered into by the Parties.

3.0 TAXES AND ENCUMBRANCES

3.1 CUSTOMER shall pay, when due, all taxes, special assessments, and government fees, including franchise, license, and permit fees, of any kind whatsoever which may be levied or assessed upon CUSTOMER for conducting business as a telecommunications service provider within the City of Los Angeles and other California locations or as a result of CUSTOMER's use of the CABLE SYSTEM and/or CUSTOMER SYSTEM during the term of this Master Agreement and any applicable IRU (hereinafter collectively referred to as "Taxes").

3.2 CUSTOMER represents and warrants that CUSTOMER's acts or omissions shall not interfere with LADWP's ownership and control of the CABLE SYSTEM and/or CUSTOMER SYSTEM, and said system will remain free and clear from all liens, including mechanic's liens, and encumbrances resulting from CUSTOMER's use of the CABLE SYSTEM and/or CUSTOMER SYSTEM during the term of this Master Agreement and any applicable IRU.

3.3 The LADWP shall pay, when due, all taxes, licenses, and state and/or federal fees based upon the physical location of the CABLE SYSTEM and/or CUSTOMER SYSTEM and any construction in, on, across, along or through any public or private roads, highways or rights-of-way pertaining thereto, excluding any taxes, fees or costs expressly approved by CUSTOMER within any applicable IRU.

3.4 In the event that any such Taxes are imposed on or assessed against CUSTOMER for the sole reason of its use of or based on the physical location of the CABLE SYSTEM and/or CUSTOMER SYSTEM. CUSTOMER shall have the right to protest, by appropriate proceedings, the imposition or assessment of any such Taxes. In such event, CUSTOMER shall indemnify and hold LADWP harmless from any expense, legal action or cost, including reasonable attorney's fees, resulting from the exercise of its rights under this Section 3.4, and CUSTOMER shall further adhere to the provisions of Sections 7.2 and 7.3 herein.

4.0 MAINTENANCE/EMERGENCY REPAIRS AND ADDITIONAL REQUESTS FOR SERVICE

4.1 Restriction on CUSTOMER's Maintenance. CUSTOMER is prohibited from performing any repairs or maintenance on the CABLE SYSTEM and/or CUSTOMER SYSTEM. CUSTOMER is further prohibited from accessing the CUSTOMER SYSTEM without prior approval of LADWP.

4.2 Scope of Maintenance and Repairs. All maintenance and repair functions on the CABLE SYSTEM and/or CUSTOMER SYSTEM and all facilities, conduits, innerducts, poles, and equipment that pass through said system, shall be performed by LADWP or its contractors with reasonable notice to CUSTOMER. CUSTOMER shall provide, upon the request of LADWP, one or more of its employees or contractors to be present when LADWP undertakes any maintenance or repair of CABLE SYSTEM when LADWP accesses the CUSTOMER's premises or the edge of LADWP's demarcation.

4.2.1 Emergency Maintenance by LADWP. The LADWP shall be financially and operationally responsible for all emergency maintenance and repair activities undertaken on the CABLE SYSTEM and/or CUSTOMER SYSTEM during the Term of this Master Agreement and any applicable IRU. "Emergency Maintenance" includes any failure, interruption or impairment within the CABLE SYSTEM and/or CUSTOMER SYSTEM that CUSTOMER reports to LADWP of such occurrence. The LADWP shall respond to a CUSTOMER request for Emergency Maintenance within Four (4) hours after receiving such request or report. The LADWP shall use its best efforts to perform maintenance and repair to correct any failure, interruption in the CABLE SYSTEM and/or CUSTOMER SYSTEM upon the CUSTOMER's compliance with the Trouble-Reporting Escalation Procedure, set forth in IRU Exhibit G of the Short Form IRU Lease Agreement.

In the event that LADWP determines that the error, fault or out of tolerance condition reported by CUSTOMER was not caused by the CUSTOMER SYSTEM, CUSTOMER shall be charged for False Call Outs at the standard LADWP rates set forth in the related IRUs in effect at the time that services were performed. "False Call Outs" is defined as a CUSTOMER request for LADWP to investigate and/or perform maintenance at a particular location or area which LADWP subsequently discovers to be unnecessary. The LADWP will charge a minimum of Four (4) hours for each request for Emergency Maintenance for False Call Outs.

4.2.2 Emergency Maintenance by CUSTOMER. CUSTOMER is prohibited from performing any Emergency Maintenance on the CABLE SYSTEM and/or CUSTOMER SYSTEM.

4.2.3 Scheduled Maintenance. The LADWP may periodically schedule and perform maintenance, at its sole discretion, on the CABLE SYSTEM and/or CUSTOMER SYSTEM to protect its reliability ("Scheduled Maintenance").

4.2.4 Modification of CUSTOMER SYSTEM. CUSTOMER may request modification(s) to CUSTOMER SYSTEM by delivering to LADWP a scope of work detailing the desired service(s) and time of delivery. Upon receipt of such request, LADWP will provide CUSTOMER a cost estimate based on price of material and LADWP labor rates in accordance with IRU Exhibit E – Maintenance and Repair of each applicable Short Form IRU Lease Agreement. When requesting for new fiber or service, CUSTOMER must refer to Section 10.1 herein.

4.3 Priority of Restoration. In the event of any failure, interruption or impairment that simultaneously or sequentially affects both (i) LADWP's electrical and/or water service capacity and (ii) the CUSTOMER SYSTEM, in an adverse manner, restoration of the CUSTOMER SYSTEM shall at all times be and remain subordinate to the restoration of LADWP's electrical and/or water service capacity. Based upon LADWP's priority of restoration and its inability to timely repair or restore the CUSTOMER SYSTEM, the CUSTOMER shall have the right to terminate any IRU which includes the fibers and components of the CUSTOMER SYSTEM adversely affected by the failure, interruption or impairment, subject to any applicable termination settlement charges set forth in Section 14.10.

5.0 DELIVERY AND ACCEPTANCE TESTING

5.1 Acceptance Testing. The LADWP will perform Acceptance Testing. The LADWP will notify CUSTOMER when the subject segment of fibers relating to CUSTOMER's order has met the technical specifications identified within the applicable IRU ("Acceptance Testing Results"). Within Ten (10) calendar days of receipt of such notice ("Acceptance Period"), CUSTOMER shall sign and deliver its written acknowledgment of the Delivery and shall include the identity of each fiber at issue within its acknowledgment ("Acceptance Letter"). By signing and delivering the Acceptance Letter, CUSTOMER acknowledges that each segment of fiber listed in the Acceptance Letter complies with the applicable technical specifications. Upon either (i) the date that CUSTOMER signs the Acceptance Letter, or (ii) the expiration of the Acceptance Period without delivery of an Acceptance Letter to LADWP, such act or lapse of time shall be deemed the date that CUSTOMER officially accepts the Dark Fiber at issue ("Acceptance Date"); provided that, the Acceptance Testing Results support the technical specifications identified within the applicable IRU. In the event that CUSTOMER disputes the Acceptance Testing Results, it shall notify LADWP in writing via facsimile or personal courier within Ten (10) business days of its receipts of LADWP's notice of the Acceptance Testing results, and any failure to respond within this time period shall be deemed as a waiver to dispute said results. CUSTOMER's notice of dispute regarding the Acceptance Testing Results shall specify in detail which fibers and segments do not conform, how the applicable fibers and segments do not conform, and further shall identify a desired retesting date. Upon LADWP's receipt of CUSTOMER's said notice of dispute, it will evaluate CUSTOMER's notice and schedule retesting accordingly; provided that, CUSTOMER has complied with the above notice requirements for the dispute and said dispute is based upon reliable industry standards.

5.2 Delivery. Upon the Acceptance Date, the Parties will mutually agree upon an estimated date for the delivery thereof ("Anticipated Completion Date"). The LADWP will use best commercial efforts to deliver the Dark Fiber within the time period agreed between the Parties. If LADWP does not deliver the segment of the CABLE SYSTEM by the Anticipated Completion Date and concurrently LADWP has not commenced any work (whether in part or in whole) to deliver the CUSTOMER SYSTEM by the Anticipated Completion Date, then the CUSTOMER shall have the right to either (i) terminate this Master Agreement and IRU(s) in accordance with Section 14.9.3 or (ii) extend the Anticipated Completion Date by mutual agreement at no additional cost to CUSTOMER ("Extended Anticipated Completion Date").

In no event shall the unavailability, incompatibility, delay in installation or other impairment of CUSTOMER's interconnection facilities, in whole or in part, including delays or omissions of CUSTOMER's suppliers, be used as a basis for rejecting any portion of the CUSTOMER SYSTEM upon Delivery by LADWP.

6.0 MARKET RATE ADJUSTMENT

This Master Agreement, all related IRUs, and any extensions to said agreements, shall be subject to a market rate adjustment as dictated by the language in the IRU(s) or extensions to the said agreement, but in no case shall the period between adjustments exceed Five (5) years. The LADWP shall have sole discretion on the chosen methodology for calculating and implementing this market rate adjustment, including whether the rate adjustment will be based upon a route-miles analysis, a fiber-miles analysis or another valuation methodology.

7.0 BILLING AND PAYMENT

CUSTOMER shall pay to LADWP all fees and charges hereunder as determined by the Short Form IRU Lease Agreement(s) and this Master Agreement as follows:

7.1 CUSTOMER shall pay to LADWP the initial fee, as stipulated in each Short Form IRU Lease Agreement, within Forty-Five (45) calendar days of receipt of valid invoice from LADWP.

7.2 Within Forty-Five (45) calendar days of receipt of valid invoice from LADWP following acceptance of each deliverable, CUSTOMER shall pay LADWP for recurring and nonrecurring charges as specified in the authorizing Short Form IRU Lease Agreement.

7.3 Notwithstanding any provision contained in this Master Agreement to the contrary, CUSTOMER shall have the right to dispute any fees, charges, costs, expenses, or payments for which it is invoiced by the LADWP. In the event CUSTOMER disputes any invoice, or portion thereof, received from the LADWP, CUSTOMER shall promptly pay that portion of the invoice which is undisputed. CUSTOMER shall have the right to withhold payment of any disputed amount, provided that CUSTOMER gives written notice to the LADWP of the amount so disputed and the reason for the dispute on or before the due date of the invoice.

8.0 SAFETY REGULATIONS

The LADWP will undertake all maintenance and/or repair responsibilities, and will use best commercial efforts to comply with all applicable safety requirements and industry standards.

9.0 NO POSSESSORY INTEREST IN CUSTOMER SYSTEM

9.1 Title and Interest in CUSTOMER SYSTEM. CUSTOMER agrees that all rights, title, and interests in all or any component of the CUSTOMER SYSTEM shall at all times remain exclusively with LADWP. Upon the execution of this Master Agreement and any applicable IRU, LADWP acknowledges that CUSTOMER shall have an exclusive right of use in the CUSTOMER SYSTEM for those specific Dark Fibers identified within each IRU for the duration of the applicable IRUs; provided that, CUSTOMER is not in breach of this Master Agreement or any IRU subject to this Master Agreement and no event of termination has transpired.

9.2 No Possessory Interest. The Parties do not intend for the execution of this Master Agreement or any applicable IRU to create any ownership or other possessory interest in any real and personal property, both tangible and intangible, including, but not limited to, fiber optic cable, right of ways, conduits, or equipment connected to the Associated Property which comprises the CUSTOMER SYSTEM. In the event that a possessory interest is created by the execution of this Master Agreement and any IRU, CUSTOMER shall be subject to any payment of property taxes levied upon CUSTOMER SYSTEM during its possession of said property pursuant to the term of the applicable IRU. Nothing in this Section 9.2 shall prevent CUSTOMER from contesting the

validity and/or applicability of any property taxes levied against it during the term of the applicable IRU, and CUSTOMER may refrain from making, or direct the withholding of, any such payment without being in breach of this Master Agreement and any applicable IRU; provided that, CUSTOMER shall promptly pay the required amount plus all legally imposed interest, penalties and surcharges upon a final determination by the entity or regulatory authority levying the property tax at issue.

9.3 Inclusion of Build Outs in CUSTOMER SYSTEM. The Parties acknowledge that there may be occasion to undertake build outs to adequately interface CUSTOMER's Associated Property with the CUSTOMER SYSTEM. Notwithstanding any non-recurring construction costs that CUSTOMER will incur for LADWP's undertaking of such build outs, CUSTOMER agrees that any and all build outs shall become and remain a part of the CUSTOMER SYSTEM without any property or reversionary interests vested in CUSTOMER.

9.4 Subordination of Leased Interest. The LADWP's lease of Dark Fiber to CUSTOMER shall be subject and subordinate to the terms and conditions of LADWP's underlying property rights including, without limitation, any covenant, condition, restriction, easement, reversionary interest, bonds, mortgages, and indentures, collocation license agreements and other matters, whether or not such instrument has been recorded within official records. CUSTOMER's lease shall further be subject and subordinate to LADWP's underlying property rights to use and maintain the right of way for other operations and LADWP's activities, facility access agreements and collocation license agreements.

10.0 REQUESTS FOR SPECIAL OR ADDITIONAL SERVICES

10.1 Additional Requests for Fiber or Services. Notwithstanding the execution of this Master Agreement concurrently with an IRU-01, IRU-02, IRU-03, IRU-04, and IRU-05 CUSTOMER may desire to request additional fibers and/or services from LADWP. All such requests that are made subsequent in time to the execution of this Master Agreement. IRU-01, IRU-02, IRU-03, IRU-04, and IRU-05 will be evaluated within LADWP's sole discretion, and LADWP reserves the right to grant or deny such subsequent requests. Nothing in this Master Agreement, IRU-01, IRU-02, IRU-03, IRU-04, and IRU-05 shall be construed as a guarantee or a contractual right of CUSTOMER that LADWP will honor subsequent requests for additional fibers and/or service.

11.0 OPERATION OF CUSTOMER SYSTEM

11.1 Backup and Redundancy Systems for Mission Critical Services. The Parties understand and agree that the primary intent of this Master Agreement and all related IRUs is to lease dark fiber without any accompanying service. In the event that CUSTOMER employs its own electronics and photonics on the CUSTOMER SYSTEM and provides mission critical and/or life safety functions to any entity for the purpose of providing emergency services or emergency support under federal and/or state law, CUSTOMER shall arrange for a backup, redundant and duplicate system(s) to ensure the continual, uninterrupted transmission of its mission critical/life safety functions to one or more of its end users or third parties. The LADWP shall not assume any responsibility or liability for any claims whatsoever arising from any errors, losses, faults and/or failures in transmission of CUSTOMER's mission critical/life safety functions to any end user or third party, regardless if such resulting losses and/or damages of any kind or nature were foreseeable or unforeseeable.

11.2 Configuration and Operation. CUSTOMER shall be responsible for its configuration and operation of CUSTOMER's network or Associated Property which will connect to or interface with the CUSTOMER SYSTEM, including the provisioning of all facilities, network equipment, testing equipment and procedures, maintenance and other matters necessary to utilize the CUSTOMER SYSTEM. CUSTOMER shall conduct all of its operations and utilize the CUSTOMER SYSTEM in a manner that does not interfere or impair the CUSTOMER SYSTEM and/or CABLE SYSTEM.

11.3 Connection at Demarcation Point. The LADWP shall undertake any and all connections to be performed at the Demarcation Point between the CUSTOMER SYSTEM or CABLE SYSTEM and CUSTOMER's fiber network and Associated Property.

11.4 CUSTOMER's Physical Path. Any physical path extension within the CUSTOMER's private property shall be the responsibility of the CUSTOMER including, but not limited to, operation, maintenance, liability, and assumption of risks. CUSTOMER also shall be responsible for obtaining all necessary authorizations from any property owner to construct such extension.

12.0 RELOCATION

12.1 Notice Requirements for Relocation. Unless such advance notice is impracticable due to then-existing circumstances, LADWP will provide CUSTOMER with Ninety (90) calendar days' advance notice of any scheduled relocation for any portion of the CUSTOMER SYSTEM or any part of the CABLE SYSTEM which directly affects the CUSTOMER SYSTEM. The LADWP shall provide as much advance notice as possible for any unscheduled relocation.

12.2 Relocation of System. If at any time during the term of this Master Agreement and any applicable IRU, all or any portion of the CUSTOMER SYSTEM or any part of the CABLE SYSTEM which directly affects the CUSTOMER SYSTEM needs to be relocated for any reason whatsoever, LADWP shall comply with the notice requirements set forth in Section 12.1 herein and bear all expenses related to said relocation. The LADWP will use best efforts to avoid any material interruptions with CUSTOMER's use of the CUSTOMER SYSTEM.

12.3 Inability to Relocate or Material Interference. In the event that the affected portion of the CUSTOMER SYSTEM cannot be relocated or the proposed relocation becomes impractical for LADWP for operational or business reasons, either LADWP or CUSTOMER or both shall have the right, but not the obligation, to terminate the applicable portion(s) of any IRU which leases the affected portion of the CUSTOMER SYSTEM; provided that, the entire CUSTOMER SYSTEM is not affected. If the entire CUSTOMER SYSTEM is affected by the subject relocation, whether scheduled or unscheduled, this Master Agreement and all IRUs subject to this Master Agreement will automatically terminate upon written notice by LADWP that the entire CUSTOMER SYSTEM cannot be relocated.

13.0 EVENTS OF DEFAULT

13.1 Triggering Event for Default. A Party shall be in default under this Master Agreement and any applicable IRU upon the occurrence of an Event of Default as identified in Sections 13.2, 13.3, and 13.4. The non-defaulting party shall provide written notice to the defaulting party ("Notice of Default") before pursuing any remedies available by contract or law. Upon failure of the defaulting party to cure the alleged default within the cure period(s) prescribed within this Master Agreement, the non-defaulting party shall have the right, but not the obligation,

to take such action as it may deem necessary to cure the alleged default or pursue available remedies under the contract.

For default events under Sections 13.2 and 13.4, the defaulting party shall have Thirty (30) calendar days to cure the default after the non-defaulting party provides the Notice of Default. However, in cases where a default cannot be cured within the Thirty (30) calendar day period by exercise of a diligent, commercially reasonable effort, the defaulting party must cure the default within Ninety (90) calendar days after the non-defaulting party provides its Notice of Default. For a default under Section 13.3, the period to cure is expressly set forth within the provisions of said Section.

13.2 Breach of any Material Covenant or Provision. A Party shall be in default if it fails to maintain the veracity of its representations and warranties under Section 17.0 in any material respect as of the date made or deemed made, or fails to perform or abide by any material covenants or provisions under this Master Agreement and/or all provisions of each and every IRU subject to this Master Agreement. Upon the issuance of a Notice of Default to the defaulting party and the lapse of time to cure said default pursuant to Section 13.1, the non-defaulting party shall have the right, but not the obligation, to terminate this Master Agreement and all IRUs subject thereto.

13.3 Non-Payment. CUSTOMER's failure to make timely payments in accordance with the applicable IRU shall be deemed a default under this Master Agreement and all IRUs subject thereto. The LADWP shall have the right to terminate this Master Agreement upon Thirty (30) calendar days' advance written notice by a Notice of Default in the event that CUSTOMER fails to make full and timely payment of one or more IRU fees (recurring or non-recurring) as identified within the applicable IRU. Upon issuance of a Notice of Default, CUSTOMER has Fifteen (15) business days to cure any outstanding payments owed under any applicable IRU. If payment is not received by LADWP before the close of business on the Fifteenth (15th) business day from the date that it issued its Notice of Default, LADWP shall be entitled to terminate this Master Agreement, the applicable IRU, and all other IRUs subject to this Master Agreement regardless if CUSTOMER is current on its payment under such IRUs, and institute collections procedures for any outstanding monies owed to LADWP.

13.4 Insolvency. In the event that either Party becomes subject to bankruptcy or a custodian, receiver, trustee, intervenor, or other officer under the authority of Chapters 7, 9, 11 or 13 of the Bankruptcy Code as defined in the United States Code or any applicable state law within any jurisdiction, whether voluntary or involuntary, or makes an admission or is determined by a court of law to be insolvent, such Party shall be deemed in default of this Master Agreement and all IRUs subject thereto and either Party shall have the right to terminate this Master Agreement and all related IRUs within Thirty (30) calendar days of its notification of any bankruptcy proceeding or any admission or judicial determination of insolvency.

14.0 TERMINATION

14.1 Notice Requirements for Termination. Each Party shall provide a minimum of Thirty (30) calendar days' advance written notice to the other Party for any requests of termination of any IRU and/or this Master Agreement pursuant to Sections 14.3 through 14.8 herein. Termination pursuant to Section 14.2 shall be controlled by its expressed notice requirements.

14.2 Condemnation. If at any time during the term of this Master Agreement and any applicable IRU all or a significant portion of the CUSTOMER SYSTEM or CABLE SYSTEM which directly affects the CUSTOMER SYSTEM shall be taken for any public or quasi-public purpose by any lawful power or authority by the exercise of the right of condemnation or eminent domain, either Party shall have the right, but not the obligation, to terminate any affected IRU upon Sixty (60) calendar days' advance written notice. Both Parties shall be permitted to participate in any condemnation proceedings to seek to obtain compensation by means of separate awards for the economic value of their respective interests in the CUSTOMER SYSTEM or CABLE SYSTEM. In the event that CUSTOMER's interest in such proceeding cannot be severed from LADWP's interest, CUSTOMER shall be entitled to receive its pro rata share of the award for its interest in the CUSTOMER SYSTEM.

Upon receipt of a formal notice of condemnation or eminent domain, each Party shall notify the other immediately of any condemnation proceeding filed against the portions of the CUSTOMER SYSTEM or CABLE SYSTEM which directly affects the CUSTOMER SYSTEM. Each Party shall also notify the other of any similar threatened condemnation proceeding and agrees not to sell, transfer or encumber the CUSTOMER SYSTEM, CABLE SYSTEM which directly affects the CUSTOMER SYSTEM, or CUSTOMER Associated Property to such acquiring agency or other party in lieu of condemnation or eminent domain without Sixty (60) calendar days' prior written notice to the other Party.

14.3 Damage or Destruction. If at any time during the term of this Master Agreement and any applicable IRU a significant portion of the CUSTOMER SYSTEM or CABLE SYSTEM which directly affects the CUSTOMER SYSTEM becomes inoperable and beyond reasonable repair due to damage or destruction, either Party shall have the right, but not the obligation, to terminate the affected IRU. If the damage or destruction affects the entire CUSTOMER SYSTEM, then either Party also shall have the right to terminate this Master Agreement and all IRUs subject thereto.

14.4 Relocation. In the event that Section 12.3 is invoked, the ability to terminate this Master Agreement and/or any applicable IRUs subject thereto based upon a relocation shall be controlled by the provisions of Section 12.3.

14.5 Obsolescence. If at any time during the term of this Master Agreement and any applicable IRU, CUSTOMER notifies LADWP and demonstrates with sufficient evidence based upon industry standards that any portion or portions of the CUSTOMER SYSTEM have reached technical obsolescence, then CUSTOMER shall have the right, but not the obligation, to terminate the affected IRU for the obsolete portion of the CUSTOMER SYSTEM, or to terminate this Master Agreement and all IRUs if proven by sufficient evidence that the entire CUSTOMER SYSTEM has reached technical obsolescence. Notwithstanding the foregoing sentence, CUSTOMER shall not have the right to terminate this Master Agreement or any applicable IRU on the basis of economical obsolescence.

14.6 Chronic Failures. "Chronic Failures" are failures in the CUSTOMER SYSTEM as measured in increments of Three (3) consecutive months commencing on the date of the initial complaint of failure and continuing for Three (3) consecutive months thereafter, whereby the CUSTOMER SYSTEM fails to meet the performance criteria defined within the applicable IRU on Five (5) separate days within the Three (3) month period, without regard to the number of failures on a given day.

14.7 Force Majeure. In the event that any failure identified as a Force Majeure under Section 16.0 continues without interruption for more than Sixty (60) consecutive days, the other Party affected by the Force Majeure may terminate the affected portion of the fiber segments as identified within the applicable IRU.

14.8 Operational Necessity by LADWP. If at any time during the term of this Master Agreement and all IRUs subject thereto LADWP determines that any portion or all of the CUSTOMER SYSTEM is required for its operations including, without limitation, its electric utility and water utility businesses and financial planning, then LADWP shall have the right to terminate this Master Agreement and all IRUs subject thereto upon One Hundred Eighty (180) calendar days' advance written notice.

In addition, the LADWP shall have the right to terminate this Master Agreement upon One Hundred Twenty (120) calendar days' written notice to CUSTOMER if this Master Agreement creates an adverse impact upon the status of the LADWP's tax exempt bonds, as determined within LADWP's sole discretion.

14.9 Termination for Convenience

14.9.1 By LADWP. Notwithstanding any provision contained in this Master Agreement to the contrary, the LADWP shall have the right, at its sole discretion and for any reason, to terminate any Short Form IRU Lease Agreement upon One Hundred Eighty (180) calendar days' prior written notice to CUSTOMER. At the time of such notice of termination, the LADWP shall refund any prepaid and unapplied fees.

14.9.2 By CUSTOMER. Notwithstanding any provision contained in this Master Agreement to the contrary, CUSTOMER shall have the right, at its sole discretion and for any reason, to terminate any Short Form IRU Lease Agreement only after the conclusion of one year from the Acceptance Date, upon One Hundred Eighty (180) calendar days' prior written notice to LADWP. CUSTOMER shall remain responsible for all charges incurred up to and including the final termination date.

14.10 Early Termination Charges

14.10.1 If CUSTOMER terminates this Master Agreement and all IRUs subject thereto in accordance with Section 14.9.2, CUSTOMER will pay, within Thirty (30) calendar days of the termination, all accrued but unpaid charges incurred through the date of termination.

14.10.2 In the event CUSTOMER elects to terminate any Short Form IRU Lease Agreement under the terms of the provisions of Section 14.9.2, the cumulated difference between the annual IRU payment based on the appropriate long term discount applied (if any) to the then-current term of the original term shall be calculated retroactive to all CUSTOMER IRU payments from commencement through the termination of each Short Form IRU Lease Agreement. CUSTOMER shall reimburse to LADWP any term discounts no longer qualified under the new term. The LADWP shall refund any prepaid and unapplied fee.

14.10.3 In the event CUSTOMER elects to terminate any Short Form IRU Lease Agreement under the terms of the provisions of Section 14.9.2 prior to completion of the initial term of the said Short Form IRU Lease Agreement, the Parties hereby agree and consent to LADWP including fees for lost capital investments on the extension of CUSTOMER SYSTEM and

One-half (½) of annual recurring lease fee of each Short Form IRU Lease Agreement as part of the Termination Settlement Charges.

15.0 LIMITATION OF REMEDIES

Notwithstanding any provision of this Master Agreement and any applicable IRU, CUSTOMER agrees that in no event shall LADWP be liable for any direct, indirect, incidental, special, consequential, exemplary, punitive or reliance damages as a result of the performance or nonperformance of its obligations under this Master Agreement and any IRU subject thereto, whether or not such damages were foreseeable or a Party was notified in advance of the possibility of such damages.

16.0 FORCE MAJEURE

With the exception of any and all payment obligations set forth within this Master Agreement and all IRUs subject hereto, neither Party shall be liable for any failure of performance under this Master Agreement and any applicable IRU if such failure is due to any cause or causes of beyond such Party's reasonable control including, without limitation: acts of God; fire; flood; earthquake or other catastrophes; explosions; vandalism; cable cuts; adverse weather conditions; material or facility shortages which did not arise from a Party's failure to timely place an order; governmental action; emergencies announced at the national, state, county or city levels; insurrections; riots; labor difficulties; wars; strikes; lockouts; work stoppages or other labor difficulties. CUSTOMER's invocation of this provision shall not relieve CUSTOMER of its obligation(s) to pay for any services actually received under any applicable IRU.

17.0 REPRESENTATIONS AND WARRANTIES

17.1 Exclusive Control over Telecommunications Services. CUSTOMER represents and warrants that it has or shall have exclusive control over its provisioning of services for telephone, telecommunications, data, internet, cable television, digital subscriber line, Voice over Internet Protocol (VoIP), broadband, cable television or other video services, and other telecommunication services including, without limitation, CUSTOMER premise and nodal electronics, sales and marketing, electronics maintenance and monitoring, and billing and collection.

17.2 Authorization for provision of Telecommunication Services. CUSTOMER represents and warrants that it is authorized or will be authorized upon the effective date of any IRU to provide its telephone, telecommunications, data, internet, cable television, digital subscriber line, VoIP, broadband, cable television or other video services, and other telecommunication services within the State of California and the City of Los Angeles and that it is authorized or will be authorized to provide such services on the CABLE SYSTEM and/or CUSTOMER SYSTEM upon the effective date of any IRUs.

17.3 Contractual Relationships with End Users or Third Parties. CUSTOMER represents and warrants that it shall include a waiver of indirect, special, consequential, exemplary or punitive damages against LADWP, the City of Los Angeles, the Board of Water and Power Commissioners (hereinafter referred to as "Board"), and their appointed or elected officials, officers, managers, agents, representatives, contractors and employees in any and all agreements with End Users or third parties relating to CUSTOMER's lease and/or use of the CUSTOMER SYSTEM during the Term of this Master Agreement and every IRU subject thereto.

18.0 DISCLAIMERS

18.1 Content of Transmitted Data or Communications. The LADWP disclaims any and all liability or responsibility whatsoever for the content (including the nature of materials, opinions and views) of any and all data or communications transmitted in, across, on, through or over the CUSTOMER SYSTEM after the Acceptance Date. CUSTOMER agrees that it shall make no claim whatsoever against LADWP relating to the content of any data or communications transmitted in, across, on, through or over the CUSTOMER SYSTEM, and CUSTOMER shall defend, indemnify and hold LADWP harmless from any and all claims of any type or nature whatsoever by third parties related to the transmission of such data or communications thereof.

18.2 Errors or Losses in Transmission. To the extent that CUSTOMER arranges for Communications Transport Services (CTS) concurrently with or after the Acceptance Date, LADWP disclaims any and all liability or responsibility whatsoever for any damage (including, without limitation, positive damage, negative damage, lost profit, frustrated expenses, data damage, data loss, errors during transmission, business loss, enrichment claims, and any legal fees and consultation) which are caused by or related to the use of said CTS in, across, on, through or over the CUSTOMER SYSTEM. CUSTOMER agrees that it shall make no claim whatsoever against LADWP relating to its use of CTS in, across, on, through or over the CUSTOMER SYSTEM, and CUSTOMER shall defend, indemnify and hold LADWP harmless from any and all claims by End Users or third parties related to said CTS.

18.3 Use of Names or Trademarks. Neither Party shall use any name, logo or service mark of the other Party without the express written consent of the other Party.

19.0 INSURANCE REQUIREMENT FOR CONSTRUCTION

In the event that CUSTOMER requests or requires construction-related modifications prior to the provisioning of the CUSTOMER SYSTEM pertaining to any LADWP-controlled facility, structure, or space, the following terms and conditions shall apply:

19.1 Insurance – General Statement. CUSTOMER must provide evidence of insurance that conforms to the insurance requirements explained in detail within Section 19.2 and the "Contract Insurance Requirements" sheet attached hereto as Exhibit B, which specifically outlines the types and amounts of coverage required for this Master Agreement. For CUSTOMER's further information and use, "Special Endorsement Forms," "Guidance for Submitting Evidence of Insurance," and information on our insurance program also are available on LADWP's website.

Acceptable evidence of required insurance, from insurers acceptable to the LADWP, will be required to be submitted within Thirty (30) calendar days of CUSTOMER's request or necessity for construction-related modifications and prior to any commencement of construction activities. Such insurance shall remain current throughout the term of this Master Agreement. Said evidence of insurance must be on file with the Risk Management Section ***in order for any construction-related work to commence.***

For further information regarding these requirements, please contact:

Los Angeles Department of Water and Power
Risk Management Section
Telephone: (213) 367-4674
Facsimile: (213) 367-0214
Web: www.ladwp.com/riskmanagement

19.2 Insurance – Applicable Terms and Conditions.

19.2.1 Additional Insured Status Required. CUSTOMER shall procure at its own expense, and keep in effect at all times during the term of this Master Agreement, the types and amounts of insurance specified on the attached Contract Insurance Requirements page. The specified insurance shall also, either by provisions in the policies, by LADWP's own endorsement form or by other endorsement attached to such policies, include and insure the City of Los Angeles, its Department of Water and Power, its Board, and all of its appointed and elected officials, officers, employees and agents, their successors and assigns, as Additional Insureds (except for Professional Liability and Workers' Compensation), against the area of risk described herein as it respects CUSTOMER's acts or omissions in its performance of the agreement, hereunder or other related functions performed by or on behalf of CUSTOMER. Such insurance shall not limit or qualify the liabilities and obligations of the CUSTOMER assumed under the contract.

19.2.2 Severability of Interests and Cross Liability Required. Each specified insurance policy (other than Workers' Compensation and Employers' Liability and Property coverages) shall contain a Severability of Interest and Cross Liability clause which states, "It is agreed that the insurance afforded by this policy shall apply separately to each insured against whom claim is made or suit is brought except with respect to the limits of the company's liability," and a Contractual Liability Endorsement which shall state, "Such insurance as is afforded by this policy shall also apply to liability assumed by the insured under this Master Agreement with the LADWP."

19.2.3 Primary and Non-Contributory Insurance Required. All such insurance shall be Primary and Noncontributing with any other insurance held by LADWP where liability arises out of or results from the acts or omissions of CUSTOMER, its agents, employees, officers, assigns, or any person or entity acting for or on behalf of CUSTOMER. Any insurance carried by the LADWP which may be applicable shall be deemed to be excess insurance and the CUSTOMER's insurance is primary for all purposes despite any conflicting provision in the CUSTOMER's policies to the contrary.

19.2.4 Deductibles Subject to Department's Discretion. Deductibles and/or self-insured retentions shall be at the sole discretion of the Risk Manager of LADWP (hereinafter referred to as "Risk Manager"). The LADWP shall have no liability for any premiums charged for such coverage(s). The inclusion of the City of Los Angeles, LADWP, its Board, and all of elected and appointed officials, its officers, employees and agents, and their agents and assigns, as additional insureds, is not intended to, and shall not, make them, or any of them a partner or joint venturer with CUSTOMER in its operations.

19.2.5 Proof of Insurance for Renewal or Extension Required. At least Ten (10) calendar days prior to the expiration date of any of the policies required on the attached Contract Requirement page, documentation showing that the insurance coverage has been renewed or extended shall be filed with the LADWP. If such coverage is canceled or reduced in coverage, CUSTOMER shall, within Fifteen (15) calendar days of such cancellation or reduction of coverage, file with the LADWP evidence that the required insurance has been reinstated or provided through another insurance company or companies.

19.2.6 Submission of Acceptable Proof of Insurance and Notice of Cancellation. CUSTOMER shall provide proof to the LADWP Risk Manager of all specified insurance and related requirements either by production of the actual insurance policy(ies), by use of LADWP's

own endorsement form(s), by other written evidence of insurance acceptable to the Risk Manager, but always in a form acceptable to the Risk Manager and the Office of the City Attorney. The documents evidencing all specified coverages shall be filed with the LADWP prior to Contractor beginning operations hereunder. Said proof shall contain at a minimum, the applicable policy number, the inclusive dates of policy coverages, the date the protection begins for the LADWP, and the insurance carrier's name. It shall bear an original signature of an authorized representative of said carrier, and shall provide that such insurance shall not be subject to cancellation, material reduction in coverage or non-renewal except after written notice by certified mail, return receipt requested, to the City Attorney of the City of Los Angeles at least Thirty (30) calendar days' prior to the effective date thereof. The notification shall be sent by registered mail to: Risk Management Section, Los Angeles Water and Power, Post Office Box 51111, JFB Room 465, Los Angeles, California 90051-0100.

19.2.7 Claims-Made Insurance Conditions. Should any portion of the required insurance be on a "Claims Made" policy, the CUSTOMER shall, at the policy expiration date following completion of work, provide evidence that the "Claims Made" policy has been renewed or replaced with the same limits, terms and conditions of the expiring policy, or that an extended Three (3) years discovery period has been purchased on the expiring policy at least for the contract under which the work was performed.

19.2.8 Failure to Maintain and Provide as Cause for Termination. Failure to maintain and provide acceptable evidence of the required insurance for the required period of coverage on construction-related modifications shall constitute a breach of contract, upon which the LADWP may immediately terminate or suspend this Master Agreement.

19.2.9 Periodic Right to Review/Update Insurance Requirements. The LADWP and CUSTOMER agree that the insurance policy limits specified on the attached Contract Insurance Requirements page may be reviewed for adequacy annually throughout the term of this Master Agreement by the Risk Manager/City Attorney, who may thereafter require CUSTOMER to adjust the amounts and types of insurance coverage however the Risk Manager/City Attorney deems to be adequate and necessary. The City of Los Angeles reserves the right to have submitted to it, upon request, all pertinent information about the agent and carrier providing such insurance, including applicable license and ratings.

19.3 Specific Insurance Requirement. See Attachment "Contract Insurance Requirements," attached hereto as Exhibit B.

20.0 INDEMNIFICATION and ASSUMPTION OF LIABILITY

Excepting proof of active negligence or willful misconduct of LADWP, CUSTOMER, its successors and/or assigns ("Indemnitor"), shall indemnify and hold harmless the City of Los Angeles, LADWP, the Board of Water and Power Commissioners, and all of their Boards, LADWP's officers, managers, representatives, agents, employees, assigns, successors in interest, insurers, subcontractors, and licensees ("Indemnitee") from and against any and all claims, demands, costs, damages, liabilities (both joint and/or several), judgments, suits, settlements, civil fines, and penalties, or losses or expenses of any kind or nature whatsoever (including attorney fees, expert fees, and disbursements) which arise from any claim, allegation, assertion, proceeding, civil, criminal, administrative or investigative matter related to or arising out of: (i) any acts, errors or omissions of CUSTOMER, its agents, contractors or employees or any negligence or intentional misconduct by CUSTOMER or its agents, contractors or employees in the use or operation of the CUSTOMER SYSTEM or the connections thereto; (ii) any breach by

CUSTOMER of any representation and warranty, obligation or covenant under this Master Agreement; (iii) any claim of any type or nature whatsoever by CUSTOMER's clientele relating to the provisioning of telecommunications services by CUSTOMER to such client or clients over the CUSTOMER SYSTEM; (iv) any personal injury to, or death of, any person or persons, and any loss, damage, destruction, or loss of use of property (both tangible and intangible as well as direct and indirect), arising out of or incident to the activities, operations and actions of CUSTOMER and its contractors, agents and/or employees. The above shall apply in all cases, except in the event that the LADWP is found by a court of competent jurisdiction to have been actively negligent or committed willful misconduct.

CUSTOMER hereby waives, releases, and discharges any and all claims for damages arising from death, personal injury or property damages that it may have, or which hereafter accrues, against the LADWP as a result of any provisioning, operation, maintenance and/or construction-related modifications of the CUSTOMER SYSTEM and interfacing points of demarcation. CUSTOMER hereby discharges the City of Los Angeles, LADWP, the Board of Water and Power Commissioners, and all of their Boards, LADWP's officers, managers, representatives, agents, employees, assigns, successors in interest, insurers, subcontractors, and licensees from and against any and all liability arising out of or connected to in any way with the provisioning, operation, maintenance and/or construction-related modifications of the CUSTOMER SYSTEM and interfacing points of demarcation. CUSTOMER further understands accidents, injuries, and property damage can arise out of the above events; knowing the risks, CUSTOMER nevertheless agrees to assume those risks and to release and to hold harmless all of the persons or agencies identified herein who might otherwise be liable to CUSTOMER and its heirs or assigns for any loss or damages. It is further understood and agreed that this provision on assumption of liability is intended by the Parties to be binding upon CUSTOMER's heirs and assigns. Furthermore, it is the intention of the Parties hereto that this provision be interpreted to impose responsibility on each Party for its own negligence.

21.0 FURTHER ASSURANCES

The Parties acknowledge that no waiver, amendment, release or modification of this Master Agreement shall be established by conduct, custom or course of dealing, but solely by a written instrument duly executed by the Parties hereto.

22.0 PROHIBITION ON PROPRIETARY INFORMATION

The LADWP and CUSTOMER agree that if either Party (the "Disclosing Party") provides confidential or proprietary, non-public information which includes written documentation ("Proprietary Information") to the other Party (the "Recipient Party"), such Proprietary Information shall be held in confidence to the extent permitted by law, and the Recipient Party shall use, maintain and store the Proprietary Information with the standard of care and protection permitted by law in effort to prevent disclosure to or unauthorized use by any third party. Proprietary Information means information furnished by either Party, its directors, officers, employees, agents or representatives, including, without limitation, its attorneys, accountants, consultants and financial advisors. Proprietary Information shall not include information which (i) at the time of disclosure is fully within the public domain through no breach of this Master Agreement by either party; (ii) is shown by evidence to have been, and in fact has been, known or independently developed by and is currently in the possession of either party prior to disclosure hereunder, (iii) was or is acquired by either from a third party who did not breach an obligation of confidentiality by disclosing it to either party or (iv) is required to be disclosed to comply with any applicable law, order, regulation or ruling; provided, however, both Parties shall give timely notice of any such

disclosure pursuant to this Section. Both Parties recognize that the City of Los Angeles and its departments is subject to the California Public Records Act (California Government Code § 6250 et seq.).

23.0 NOTICES

Any written notice, request, demand, statement, report and other communications under this Master Agreement shall be deemed properly given if sent by registered or certified mail, postage prepaid, or by a nationally recognized overnight delivery courier, or by facsimile to the address specified below, unless otherwise stated in this Master Agreement:

23.1 Notice to LADWP

Los Angeles Department of Water and Power
1230 West 3rd Street, Suite 200
Los Angeles, California 90017
Attention: Director of Fiber Optic Enterprise
Telephone: (213) 367-2426
Facsimile: (213) 367-0255

23.2 Notice to CUSTOMER

NBC Universal, Inc.
Attention: Charles Hamilton
Director Data Center Operations
Data Communications
30 Rockefeller Plaza
Building 5TS Rm. 11.102
New York, New York 10112-0002
Telephone: (212) 413-6269
Mobile: (917) 414-4762
Email: Charles.Hamilton@nbcuni.com

24.0 MISCELLANEOUS

24.1 Compliance with Law. Each Party hereto agrees that it will perform its respective rights and obligations hereunder in accordance with all applicable laws, rules and obligations.

24.2 Captions/Gender. Captions and section headings contained in this Master Agreement are for reference purposes only and shall not affect the meaning or interpretation of this Master Agreement in any way. Whenever used throughout this Master Agreement, the singular form shall include the plural form, the plural form shall include the singular form, and the use of any gender shall include all genders.

24.3 Governing Law. This Master Agreement and all related IRUs were made and entered into in the City of Los Angeles and shall be governed by, interpreted and enforced in accordance with the laws of the State of California and the City of Los Angeles, without regard to conflict of law principles.

24.4 Venue. All litigation arising out of, or relating to this Master Agreement, shall be brought in a State or Federal court in the County of Los Angeles in the State of California. The Parties irrevocably agree to submit to the exclusive jurisdiction of such courts in the State of California and waive any defense of *forum non conveniens*.

24.5 Waivers. No term or provision of this Master Agreement shall be waived and no breach excused or discharged, unless such waiver or consent shall be in writing by the Party against whom enforcement of said waiver or consent is sought and signed by a duly authorized officer of such Party.

24.6 Assignments. Neither Party shall assign, transfer, or otherwise delegate any of its rights, privileges or obligations under this Master Agreement without the other Party's advance written consent, which such consent shall not be unreasonably withheld or delayed.

24.7 Amendments. No modification or waiver of any provision of this Master Agreement and any IRU subject hereto nor consent to any departure by any party therefrom, shall in any event be effective unless the same shall be in writing and signed by each party hereto, and then such waiver or consent shall be effective only in the specific instance and for the specific purpose for which given.

24.8 Integration. The parties intend this paragraph to be a conclusive recital of fact. This Master Agreement supersedes any prior agreement, oral or written, and contains the entire agreement between the parties on the subject matter hereof. This Master Agreement is intended to be a final expression of the agreement of the parties and is an integrated agreement. There are no contemporaneous separate written or oral agreements between the parties in any way related to the subject matter of this Master Agreement. No subsequent agreement, representation or promise made by either party hereto, or by or to any employee, officer, agent or representative of either party shall be of any effect unless it is in writing and executed by the party to be bound thereby.

24.9 Severability. If any term, covenants, conditions or provision of this Master Agreement is later held to be invalid, illegal or incapable of being enforced by any rule of law or public policy, all other terms, covenants, conditions and provisions of this Master Agreement shall nevertheless remain in full force and effect; provided that, the economic or legal substance of the transactions originally contemplated do not become adverse to either Party, and a court does not find that the invalid term, covenant, condition or provision is inseparable from the remaining terms, covenants, conditions and provisions.

24.10 Headings. Section headings in this Master Agreement and any IRU subject hereto are included for convenience of reference only and shall not be given any substantive effect.

24.11 No Partnership or Agency Relationship. This Master Agreement and any IRU subject thereto shall not be deemed to create or constitute any partnership, agency, joint venture or similar relationship between LADWP and CUSTOMER.

24.12 No Third Party Beneficiaries. There are no third party beneficiaries to this Master Agreement and/or any IRU subject thereto.

24.13 Counterparts. This Master Agreement may be executed in any number of counterparts, all of which taken together shall constitute one and the same instrument, and either Party hereto may execute this Master Agreement by signing any such counterparts.

24.14 Conflicting Provisions with IRUs. To the extent that the terms and provisions of this Master Agreement are inconsistent or conflict with the express terms of any IRU subject to this Master Agreement, the terms and provisions of the Master Agreement shall prevail.

24.15 Original, Duplicate Original, and Copies of Master Agreement or IRU(s). All stamped approved original Master Agreement and IRU(s), original duplicate Master Agreement and IRU(s) and any of their copies thereof will be treated the same as long as the copies are shown to be just a copy of the original or the duplicate original.

25.0 ATTORNEY FEES AND COSTS

Both Parties hereto agree that in any action to enforce the terms of this Master Agreement that each Party shall be responsible for its own attorneys' fees and costs.

26.0 BUSINESS TAX REGISTRATION

CUSTOMER represents that it has registered its business with the City Clerk of City and has obtained and presently holds from that office a Business Tax Registration Account Number or a Business Tax Exemption Number required by City's own Business Tax Ordinance (Article 1, Chapter 2, Section 21.00 and following of City's Municipal Code). CUSTOMER shall maintain or obtain as necessary, all such certificates required of it under said Ordinance and shall not allow any such Certificate to be revoked or suspended during the term hereof.

27.0 LEGAL REPRESENTATION

Each party was represented or had adequate opportunity to be represented by legal counsel during the negotiation and execution of this Master Agreement.

IN WITNESS WHEREOF, the Parties hereto have caused this Optical Fiber Lease Agreement No. FO-741-02/2014 to be executed by their duly authorized representatives as of the date and year written above.

DEPARTMENT OF WATER AND POWER
OF THE CITY OF LOS ANGELES BY
BOARD OF WATER AND POWER COMMISSIONERS
OF THE CITY OF LOS ANGELES

APPROVED AS TO FORM AND LEGALITY
MICHAEL N. FEUER, CITY ATTORNEY

APR. 14 2014
BY *SYNDI DRISCOLL*
SYNDI DRISCOLL
DEPUTY CITY ATTORNEY

By: _____
MARCIE L. EDWARDS
General Manager

Date: _____

And: _____
BARBARA E. MOSCHOS
Secretary

NBC UNIVERSAL, INC.

By: *Charles B. Hamilton*

Title: *Director Data centers*

Date: *4/3/2014*

AGREEMENT NO. FO-742-02/2014
NBC UNIVERSAL, INC.
SHORT FORM IRU-01 LEASE AGREEMENT

This SHORT FORM IRU-01 LEASE AGREEMENT (hereinafter referred to as the "IRU-01 Agreement") is dated May 5, 2014, between the CITY OF LOS ANGELES, a California municipal corporation, acting by and through the DEPARTMENT OF WATER AND POWER (hereinafter referred to as the "LADWP" or "CITY OF LOS ANGELES") having its principal office at 111 North Hope Street, Los Angeles, California 90012, and NBC Universal, Inc. (hereinafter referred to as "CUSTOMER"), with its principal office at 100 Universal City Plaza, Universal City, California 91608-1002, and upon execution shall be a part of the CUSTOMER Optical Fiber Lease Agreement No. FO-741-02/2014 (Master Agreement) dated May 5, 2014.

WHEREAS, LADWP provides optical fiber strands and facilities in its Cable System (hereinafter referred to as "CABLE SYSTEM") for telephone, telecommunications, data, cable television or other video services, and CUSTOMER desires to use such CABLE SYSTEM components for its business in providing telephone, telecommunications, data, internet, cable television or other video services. The LADWP optical fiber strands and facilities used by CUSTOMER are identified in the Master Agreement as Customer Systems and likewise shall be referred to as "CUSTOMER SYSTEM" in this IRU-01 Agreement.

THEREFORE in consideration of the mutual agreements herein, the Parties mutually agree as follows:

1. The LADWP hereby grants to CUSTOMER an Indefeasible Right of Use (IRU) of the following LADWP CABLE SYSTEM components:
 - A. Optical fiber strands and Building/Premise Entry to buildings that are listed in the attached IRU-01 Exhibit A – Approved Optical Fiber Circuits and Building/Premise Optical Fiber Entries.

These individual LADWP CABLE SYSTEM components collectively shall be the CUSTOMER SYSTEM for this IRU-01 Agreement. The CUSTOMER SYSTEM shall be inclusive of the LADWP's fiber optic CABLE SYSTEM between and including the LADWP's sides of the originating and terminating demarcation points.

2. The LADWP will construct, install, and/or provide the CUSTOMER SYSTEM for CUSTOMER's use in accordance with the terms of the Master Agreement and this IRU-01 Agreement. The LADWP shall use reasonable efforts to comply with the project schedule that is mutually agreed by both Parties.
3. CUSTOMER's IRU in the CUSTOMER SYSTEM shall commence on May 5, 2014 and shall be valid for an initial term of Five (5) years. Thereafter this IRU-01 Agreement shall automatically renew each year up to the expiration date of the Master Agreement unless a notice to cancel is provided by the CUSTOMER Thirty (30) calendar days prior to expiration date of the initial term or renewal terms of this IRU-01 Agreement, provided that, the term of this IRU-01 Agreement shall not exceed the term of the Master Agreement, as may be amended from time to time. Subject to the terms and conditions of the Master Agreement, this IRU-01 Agreement shall continue until the term expires or until terminated as provided in Section 14.0 of the Master Agreement.
4. The LADWP shall provide the following items for the CUSTOMER SYSTEM Service:

4.1 Not Applicable.

5. CUSTOMER shall provide the following items for the CUSTOMER SYSTEM Service:

5.1 Not Applicable.

6. The payments and charges shall be in accordance with Section 7.0 of the Master Agreement and as specifically identified in the following subparagraphs:

6.1 Invoiced Charges

6.1.1 Invoiced charges are as stipulated in IRU-01 Exhibit B – Summary IRU/Agreement Invoice.

6.1.2 As included in IRU-01 Exhibit C – Fiber System One-Time Connect/Disconnect/Rearrange Charges, CUSTOMER shall pay one-time building or external network service connection and disconnection charges for each building service added or deleted after the initial establishment and acceptance of a CUSTOMER SYSTEM cable segment. One-time CUSTOMER service charges also apply if the CUSTOMER requires installation of a new distribution ring or concentrator in an already established CABLE SYSTEM or CUSTOMER SYSTEM distribution cable segment, rearrangement of existing service connections, and rearrangement of a ring or concentrator operation. The charges and application rules are identified in IRU-01 Exhibit C.

6.2 Billing and Notices

6.2.1 The LADWP shall send all notices and invoices to CUSTOMER at the following address:

NBC Universal, Inc.
Attention: Mike Robledo
100 Universal City Plaza
Room 1360-04F32
Universal City, California 91608
Telephone: (818) 777-4205
Mobile: (818) 309-3612
Facsimile: (818) 866-1533
Email: Mike.Robledo@nbcuni.com

6.2.2 The LADWP acknowledges and agrees that any invoice sent to any other CUSTOMER address, without the prior written consent or direction of CUSTOMER, will not be deemed received by CUSTOMER until such misdirected invoice is actually received by CUSTOMER at the above address.

7. All maintenance and repair functions on the CUSTOMER SYSTEM and all facilities through which the CUSTOMER SYSTEM passes, including, but not limited to, conduit, innerduct, poles and equipment, shall be performed by the LADWP. CUSTOMER is prohibited from performing any work whatsoever on the CUSTOMER SYSTEM.

7.1 Section 4.0 of the Master Agreement applies.

- 7.2 The LADWP shall maintain the CUSTOMER SYSTEM pursuant to the specifications provided in IRU-01 Exhibit D – Cable System Specifications.
- 7.3 The LADWP shall provide to CUSTOMER a Twenty-Four (24) hour a day, trouble-reporting telephone number as shown in IRU-01 Exhibit G – Trouble Reporting Procedure. CUSTOMER shall provide to LADWP a Twenty-Four (24) hour a day trouble coordination telephone number.
- 7.4 Any impairment or outage reasonably suspected to be caused by CUSTOMER SYSTEM components on the LADWP's side of the demarcation point shall require a response from the LADWP. During CUSTOMER SYSTEM impairments or outages affecting CUSTOMER's service, LADWP shall keep CUSTOMER advised and updated. The LADWP's personnel shall respond within Four (4) hours from notification by CUSTOMER of an impairment or outage materially affecting service.
- 7.5 CUSTOMER shall be charged with any false maintenance call outs at the standard LADWP rate in effect at the time services are performed. The LADWP's rates in effect at the time of execution of this IRU-01 Agreement are set forth in IRU-01 Exhibit E – Maintenance and Repair and are subject to change.
8. The LADWP will grant a credit allowance for service interruption calculated and credited in One (1) hour increments. A service interruption will be deemed to have occurred only if:
- 8.1 Service becomes unusable to CUSTOMER as a result of failure of LADWP equipment, facilities, or personnel used to provide the service; and
- 8.2 The interruption is not the result of:
- 8.2.1 The negligence or acts of CUSTOMER or its agents, employees, suppliers, or contractors;
- 8.2.2 The failure or malfunction of non-LADWP equipment, facilities, or system;
- 8.2.3 Any circumstances or causes beyond the control of the LADWP; or
- 8.2.4 A service interruption caused by scheduled maintenance, alteration, or completion of such maintenance or alteration beyond normal time requirements.
- 8.3 Such credits will accumulate during a calendar year and be credited against the CUSTOMER invoiced service charge (IRU-01 Exhibit B) for the next year and will apply only to those segments experiencing the service interruption, except for the final year of the term of this IRU-01 Agreement, in which LADWP will directly reimburse CUSTOMER for any service interruption credits.
9. This IRU-01 Agreement, including Exhibits A, B, C, D, E, F, and G, which are attached, are hereby incorporated into the Master Agreement, and all of which constitutes the entire agreement between the Parties with respect to the subject matter. This IRU-01 Agreement cannot be modified except in writing signed by both Parties.

10. Governing Law: This IRU-01 Agreement was made and entered into in the City of Los Angeles and shall be governed by, interpreted and enforced in accordance with the laws of the State of California and the City of Los Angeles, without regard to conflict of law principles.
11. Venue: All litigation arising out of, or relating to this IRU-01 Agreement, shall be brought in a State or Federal court in the County of Los Angeles in the State of California. The Parties irrevocably agree to submit to the exclusive jurisdiction of such courts in the State of California and waive any defense of forum non conveniens.
12. Price Adjustment: This IRU-01 Agreement and any extensions thereto shall be subject to a market rate adjustment after the initial term of this IRU-01 Agreement and thereafter at such time of each extension. The LADWP shall have sole discretion on the chosen valuation methodology for calculating and implementing this market rate adjustment. Extension shall include the yearly renewal of this IRU-01 Agreement, both automatic renewal or the exercise of an option to renew.
13. Each Party was represented by legal counsel during the negotiation and execution of this IRU-01 Agreement and each Party will be responsible for its own attorney fees and costs in any relevant litigation.

IN WITNESS WHEREOF, the Parties hereto have caused this Short Form IRU-01 Lease Agreement No. FO-742-02/2014 to be executed by their authorized representatives on the day and year written above.

DEPARTMENT OF WATER AND POWER
OF THE CITY OF LOS ANGELES BY
BOARD OF WATER AND POWER COMMISSIONERS
OF THE CITY OF LOS ANGELES

APPROVED AS TO FORM AND LEGALITY
MICHAEL N. FEUER, CITY ATTORNEY

APR 14 2014
BY Syndi Driscoll
SYNDI DRISCOLL
DEPUTY CITY ATTORNEY

By: _____
MARCIE L. EDWARDS
General Manager

Date: _____

And: _____
BARBARA E. MOSCHOS
Secretary

NBC UNIVERSAL, INC.

By: [Signature]

Title: Director, Data center

Date: 4/3/2014

IRU-01 EXHIBIT A
APPROVED OPTICAL FIBER CIRCUITS AND
BUILDING/PREMISE OPTICAL FIBER ENTRIES

A.1 Circuit connections and building entry:

CONNECTION	NUMBER OF STRANDS	CIRCUIT ID
Location A: Building 2220 100 Universal City Plaza Universal City, California Location B: LADWP's Receiving Station E (RS-E) (handoff to the City of Burbank) 5740 Whitnall Highway North Hollywood, California	2	LL00595

IRU-01 EXHIBIT B
SUMMARY IRU-01/AGREEMENT INVOICE

This Summary IRU-01/Agreement Invoice provides a summary of all transactions of the Short Form IRU-01 Lease Agreement No. FO-742-02/2014.

A.1 Fiber Charges:

Item	Description	IRU-01 Fees
1.0	Annual Recurring Fiber:	
1.1	Two (2) single mode optical fibers originating at a demarcation splice or breakout point located at the Building 2220, 100 Universal City Plaza, Universal City, and terminating at a demarcation splice or breakout point at the LADWP's RS-E 5740 Whitnall Highway, North Hollywood.	\$25,200.00
2.0	Annual Recurring Building Entries:	
2.1	Building/Premise Entry at Building 2220, 100 Universal City Plaza Universal City, California for two (2) fibers	\$2,400.00
2.2	Building/Premise Entry at LADWP's RS-E 5740 Whitnall Highway North Hollywood, California for two (2) fibers	\$2,400.00
	Subtotal:	\$30,000.00
	6% Volume Discount:	(\$1,800.00)
	5% Loyalty Discount:	(\$1,500.00)
	5% Term Discount:	(\$1,500.00)
	Total Annual Recurring Charge:	\$25,200.00
3.0	Non-Recurring Charge:	Not Applicable

A.2 Invoicing and Payments:

CUSTOMER's initial bill shall include the Annual Recurring Charge, prorated through the end of the calendar year, and the Non-Recurring Charge, as summarized herein. Payment of such charges shall be due in full within Forty-five (45) days of date of invoice.

The Annual Recurring Fee shall be payable in advance by the 15th day of January of each year of the Term of this IRU-01 Agreement; provided, however, that no such Recurring Fee shall be due for a segment that has not yet successfully completed the Acceptance Testing procedures set forth in IRU-01 Exhibit F – Acceptance Testing Plan.

The last Recurring Fee shall be prorated through the Term expiration date and shall be payable in advance by the 15th day of January of the expiry year.

NOTE: Transactions invoiced reflects the services purchased from the LADWP by the CUSTOMER and shall be the amount due the LADWP upon CUSTOMER acceptance. This invoice reflects no federal, state or local taxes. Taxes, as appropriate, shall be added or invoiced separately.

IRU-01 EXHIBIT C
FIBER SYSTEM
ONE-TIME CONNECT/DISCONNECT/REARRANGE CHARGES

I. General

This one-time service connection charges shall apply for the initial establishment and cutover of a CUSTOMER's point-to-point CABLE SYSTEM or distribution CABLE SYSTEM (ring or segment). The CUSTOMER shall pay for all services added or deleted, or rearranged subsequent to the cutover date and shall pay for all connection services.

II. Building Service

The following one-time charges apply for the addition or deletion of building service to/from a CUSTOMER's point-to-point or distribution CABLE SYSTEM and for all building service connections. These are based on the number of building entry fibers involved in the service. Connection is required both in-building and in-street:

A. <u>Service Addition</u>		
	<u>Fiber Count</u>	<u>Charge/Fiber</u>
1.	0 – 6	\$ 400
2.	7 – 12	\$ 250
3.	13 – Up	\$ 150
B. <u>Service Deletion</u>		
	<u>Fiber Count</u>	<u>Charge/Fiber</u>
1.	0 – 6	\$ 200
2.	7 – 12	\$ 125
3.	13 – Up	\$ 75

III. Network Service

The CUSTOMER may choose to establish a network connection to the LADWP's CABLE SYSTEM at a demarcation point in a LADWP maintenance hole or other off-premises location rather than within a building or on building grounds. Such network connection may involve either a distribution system or a point-to-point system. The following one-time charges apply to all network service connections and to all additions

or deletions of network service after initial implementation and acceptance (including all final service terminations):

A.	<u>Service Addition</u>	
	<u>Fiber Count</u>	<u>Charge/Fiber</u>
1.	0 – 6	\$ 400
2.	7 – 12	\$ 250
3.	13 – Up	\$ 150
B.	<u>Service Deletion</u>	
	<u>Fiber Count</u>	<u>Charge/Fiber</u>
1.	0 – 6	\$ 200
2.	7 – 12	\$ 125
3.	13 – Up	\$ 75

IV. Other

For services such as adding a new ring, adding or changing a concentrator location, rearranging multiple service connections, and rearranging a ring(s), the CUSTOMER shall submit a request and service description to the LADWP. The LADWP shall return to the CUSTOMER a cost estimate for the necessary work and materials within Thirty (30) days of receipt of the service request. The LADWP's charge to the CUSTOMER shall be based on time and materials and overhead involved plus a Fifteen (15) percent surcharge.

IRU-01 EXHIBIT D
CABLE SYSTEM SPECIFICATIONS

I. General

The LADWP shall install and maintain the CUSTOMER SYSTEM within the LADWP's CABLE SYSTEM in accordance with the criteria and specifications that follows:

II. Design Criteria

The LADWP will endeavor to keep the number of splices in a span to a minimum.

III. Optical Fiber Specifications

The LADWP will meet the optical specifications as detailed below for all new cable installed:

A. Single Node Fiber

<u>Parameter</u>	<u>Specifications</u>	<u>Units</u>
Maximum Attenuation, 1310 nm	0.50	dB/Km
Maximum Attenuation, 1550 nm	0.40	dB/Km
Cladding Diameter	125 ± 3	μm
Cutoff Wavelength	1250 ± 100	nm
Zero Dispersion Wavelength	1310 ± 12	nm
Maximum Dispersion, (1285-1330 nm)	3.5	ps/(nm-Km)

B. Multimode Fiber

<u>Parameter</u>	<u>Specifications</u>	<u>Units</u>
Maximum Attenuation, 850 nm	3.75	dB/Km
Maximum Attenuation, 1300 nm	1.50	dB/Km
Cladding Diameter	125 ± 3	μm
Core Diameter	62.5	μm
Minimum Modal Bandwidth (850 nm)	160	MHz-km
(1310 nm)	500	MHz-km

IV. Splice Loss

Splice loss on LADWP cables will average less than or equal to 0.15 dB for all splices the LADWP makes under this IRU-01 Agreement. The 0.15 dB splice average will only apply to splices between cables of identical physical and optical properties (i.e., core and cladding dimensions refractive index and optical loss characteristics). All splices shall be measured using bi-directional methods and averages.

V. End-to-End Attenuation Test Criteria

The CUSTOMER SYSTEM will be tested at both wavelengths specified for the installed cable type as specified below unless otherwise stated in this IRU-01 Agreement:

Single-mode fiber - 1310 nm. and 1550 nm

Multimode fiber - 850 nm and 1300 nm

The End-to-End Attenuation Test criteria will be based on the following formula:

Maximum acceptable end-to-end attenuation =

$$(A \times Lx) + (0.15 \times Nsp) + C$$

Where:

A = Max. attenuation at each wavelength as specified in Section III above.

Lx = Installed length of cable in kilometers (km)

Nsp = Number of fiber splices in the CABLE SYSTEM

C = Connector/pigtail loss. The attenuation contribution of each pigtail with associated connector is considered to be 1.0 dB comprised of 0.85 dB connector loss and 0.15 dB splice loss (pigtail to OSP cable splice).

Therefore, C = 1.0 dB if the span is connectorized on one end and
2.0 dB if connectorized on both ends

The parameters above are guaranteed unless otherwise specified.

In the event that the fiber measured attenuation values change after the cable is installed and is degraded by 2.0 dB or greater than specified above, the LADWP will perform corrective maintenance pursuant to Exhibit E of this IRU-01 Agreement to attempt to restore the fiber to its original specified attenuation values.

VI. Analog Video

The LADWP will not warrant CUSTOMER analog video transmission within the foregoing system parameters.

IRU-01 EXHIBIT E
MAINTENANCE AND REPAIR

Charges for Time and Material Service

The LADWP shall perform maintenance service at the rates established below, which rates are subject to change. Unless specifically authorized by the CUSTOMER, no Scheduled Maintenance will be performed outside of normal working hours, detailed below:

<u>Normal Working Hours</u> 7:00 a.m. to 3:30 p.m., Monday through Friday (Except LADWP-observed holiday)	<u>Hourly Rate</u> \$ 85.00
<u>Overtime Hours</u> 6:00 a.m. to 7:00 a.m., and 3:30 p.m. to 12:00 midnight, Monday through Friday (Except LADWP-observed holiday)	\$ 105.00
<u>Holiday Hours and Special Call Out:</u> Any time during an LADWP-observed holiday or any time during a Saturday or Sunday, or any time between the hours of 12:00 midnight and 6:00 a.m., Monday through Friday	\$ 130.00

Charges will be made for travel time to the location where maintenance is to be performed. If maintenance carries over after 3:30 p.m. or any maintenance during holiday hours of special call out, charges will also be made for travel time from the said location. Charges will be for a minimum of Two (2) hours for normal and overtime hours and for a minimum of Four (4) hours for holiday hours and special call out.

LADWP Holiday Schedule:

New Year's Day
Martin Luther King, Jr. Day
Presidents' Day
Memorial Day (Observed)
Independence Day

Labor Day
Columbus Day (Observed)
Veterans Day (Observed)
Thanksgiving Day and Day After
Christmas Day

All rates, charges, and holiday schedule are subject to change.

IRU-01 EXHIBIT F
ACCEPTANCE TESTING PLAN
FIBER ACCEPTANCE TESTING PROCEDURES

The LADWP will conduct the following tests as part of its Acceptance Testing Plan:

1. Non-destructive Attenuation Test (End-to-End)
2. Optical Time Domain Reflectometer Tests (OTDR)

Fiber acceptance testing will be performed to ensure that the Customer Fiber Segments will operate within the parameters of the Specifications set forth in IRU-01 Exhibit D – Cable System Specifications.

More specifically, fiber acceptance testing will include the following:

1. Continuity/Uniformity Tests

All fibers shall be tested bi-directionally at 1310 nm or 1550 nm, as applicable, with an OTDR; the subsequent traces shall be inspected for End-to-End continuity and for uniform attenuation. These traces will be stored on diskette and will be compatible with Laser Precision PC-OTDR software.

2. Optical Length

The OTDR will be used to determine the end-to-end optical length of the cable where possible.

3. Splice Loss

Splice loss will be measured bi-directionally with an OPTDR using the Splice Loss Average method. The average acceptance splice loss shall be the measurement for splice loss set forth below.

4. End-to-End Loss

Using a light source and a power meter, the bi-directional, connector-to-connector attenuation will be measured for each fiber at 1310 nm and 1550 nm, as applicable. The acceptance average attenuation per kilometer shall be the attenuation set forth in IRU-01 Exhibit D – Cable System Specifications.

IRU-01 EXHIBIT F

LOS ANGELES DEPARTMENT OF WATER & POWER
FIBER OPTIC ENTERPRISE
ACCEPTANCE FORM

Agreement No.: _____
Demarcation Point 1: _____
Demarcation Point 2: _____
Company Name: _____
Address: _____

Customer Contact: _____
Phone: _____
Number of fibers: _____
Distance: _____
Attenuation Test
Results: Within contract specifications
OTDR Traces
Attached: OTDR traces
LADWP Contact: _____
Phone: _____

Special Notes: _____

System installation is complete and the
fibers are ready for normal service under
the care of LADWP maintenance
organization

Name Charles B. Hamilton
Approved [Signature]
Customer Representative
Date 4/3/2014

Name _____
Approved _____
LADWP Representative

Date _____

System is accepted for normal service
under care of customer operations and
maintenance organization

Name [Signature]
Approved _____
Customer Manager
Date 4/3/2014

Name _____
Approved _____
LADWP Manager

Date _____

IRU-01 EXHIBIT G

LOS ANGELES DEPARTMENT OF WATER & POWER
TROUBLE REPORTING PROCEDURE

The LADWP maintains its fiber optic network (CABLE SYSTEM) in accordance with industry standards. Should trouble with the service arise, please call the following number:

LADWP Telecommunications Trouble Number:
(213) 367-2225 (367-CABL) (24 hours)

This is the number of the LADWP's Voice Operations Center (VOC). The VOC will escalate continuing troubles to LADWP's management.

Upon clearance of the trouble, the VOC will notify the trouble-reporting location of clearance and reason for the trouble.

The LADWP shall be on site and begin investigating and correcting the reported condition within Four (4) hours of notification and will provide the Customer with progress reports at Four (4) hour intervals.

AGREEMENT NO. FO-743-02/2014
NBC UNIVERSAL, INC.
SHORT FORM IRU-02 LEASE AGREEMENT

This SHORT FORM IRU-02 LEASE AGREEMENT (hereinafter referred to as the "IRU-02 Agreement") is dated May 5, 2014, between the CITY OF LOS ANGELES, a California municipal corporation, acting by and through the DEPARTMENT OF WATER AND POWER (hereinafter referred to as the "LADWP" or "CITY OF LOS ANGELES") having its principal office at 111 North Hope Street, Los Angeles, California 90012, and NBC Universal, Inc. (hereinafter referred to as "CUSTOMER"), with its principal office at 100 Universal City Plaza, Universal City, California 91608-1002, and upon execution shall be a part of the CUSTOMER Optical Fiber Lease Agreement No. FO-741-02/2014 (Master Agreement) dated May 5, 2014.

WHEREAS, LADWP provides optical fiber strands and facilities in its Cable System (hereinafter referred to as "CABLE SYSTEM") for telephone, telecommunications, data, cable television or other video services, and CUSTOMER desires to use such CABLE SYSTEM components for its business in providing telephone, telecommunications, data, internet, cable television or other video services. The LADWP optical fiber strands and facilities used by CUSTOMER are identified in the Master Agreement as Customer Systems and likewise shall be referred to as "CUSTOMER SYSTEM" in this IRU-02 Agreement.

THEREFORE in consideration of the mutual agreements herein, the Parties mutually agree as follows:

1. The LADWP hereby grants to CUSTOMER an Indefeasible Right of Use (IRU) of the following LADWP CABLE SYSTEM components:
 - A. Optical fiber strands and Building/Premise Entry to buildings that are listed in the attached IRU-02 Exhibit A – Approved Optical Fiber Circuits and Building/Premise Optical Fiber Entries.

These individual LADWP CABLE SYSTEM components collectively shall be the CUSTOMER SYSTEM for this IRU-02 Agreement. The CUSTOMER SYSTEM shall be inclusive of the LADWP's fiber optic CABLE SYSTEM between and including the LADWP's sides of the originating and terminating demarcation points.

2. The LADWP will construct, install, and/or provide the CUSTOMER SYSTEM for CUSTOMER's use in accordance with the terms of the Master Agreement and this IRU-02 Agreement. The LADWP shall use reasonable efforts to comply with the project schedule that is mutually agreed by both Parties.
3. CUSTOMER's IRU in the CUSTOMER SYSTEM shall commence on May 5, 2014 and shall be valid for an initial term of Five (5) years. Thereafter this IRU-02 Agreement shall automatically renew each year up to the expiration date of the Master Agreement unless a notice to cancel is provided by the CUSTOMER Thirty (30) calendar days prior to expiration date of the initial term or renewal terms of this IRU-02 Agreement, provided that, the term of this IRU-02 Agreement shall not exceed the term of the Master Agreement, as may be amended from time to time. Subject to the terms and conditions of the Master Agreement, this IRU-02 Agreement shall continue until the term expires or until terminated as provided in Section 14.0 of the Master Agreement.
4. The LADWP shall provide the following items for the CUSTOMER SYSTEM Service:

- 4.1 Not Applicable.
5. CUSTOMER shall provide the following items for the CUSTOMER SYSTEM Service:
- 5.1 Not Applicable.
6. The payments and charges shall be in accordance with Section 7.0 of the Master Agreement and as specifically identified in the following subparagraphs:
- 6.1 Invoiced Charges
- 6.1.1 Invoiced charges are as stipulated in IRU-02 Exhibit B – Summary IRU/Agreement Invoice.
- 6.1.2 As included in IRU-02 Exhibit C – Fiber System One-Time Connect/Disconnect/Rearrange Charges, CUSTOMER shall pay one-time building or external network service connection and disconnection charges for each building service added or deleted after the initial establishment and acceptance of a CUSTOMER SYSTEM cable segment. One-time CUSTOMER service charges also apply if the CUSTOMER requires installation of a new distribution ring or concentrator in an already established CABLE SYSTEM or CUSTOMER SYSTEM distribution cable segment, rearrangement of existing service connections, and rearrangement of a ring or concentrator operation. The charges and application rules are identified in IRU-02 Exhibit C.
- 6.2 Billing and Notices
- 6.2.1 The LADWP shall send all notices and invoices to CUSTOMER at the following address:
- NBC Universal, Inc.
Attention: Mike Robledo
100 Universal City Plaza
Room 1360-04F32
Universal City, California 91608
Telephone: (818) 777-4205
Mobile: (818) 309-3612
Facsimile: (818) 866-1533
Email: Mike.Robledo@nbcuni.com
- 6.2.2 The LADWP acknowledges and agrees that any invoice sent to any other CUSTOMER address, without the prior written consent or direction of CUSTOMER, will not be deemed received by CUSTOMER until such misdirected invoice is actually received by CUSTOMER at the above address.
7. All maintenance and repair functions on the CUSTOMER SYSTEM and all facilities through which the CUSTOMER SYSTEM passes, including, but not limited to, conduit, innerduct, poles and equipment, shall be performed by the LADWP. CUSTOMER is prohibited from performing any work whatsoever on the CUSTOMER SYSTEM.
- 7.1 Section 4.0 of the Master Agreement applies.

- 7.2 The LADWP shall maintain the CUSTOMER SYSTEM pursuant to the specifications provided in IRU-02 Exhibit D – Cable System Specifications.
 - 7.3 The LADWP shall provide to CUSTOMER a Twenty-Four (24) hour a day, trouble-reporting telephone number as shown in IRU-02 Exhibit G – Trouble Reporting Procedure. CUSTOMER shall provide to LADWP a Twenty-Four (24) hour a day trouble coordination telephone number.
 - 7.4 Any impairment or outage reasonably suspected to be caused by CUSTOMER SYSTEM components on the LADWP's side of the demarcation point shall require a response from the LADWP. During CUSTOMER SYSTEM impairments or outages affecting CUSTOMER's service, LADWP shall keep CUSTOMER advised and updated. The LADWP's personnel shall respond within Four (4) hours from notification by CUSTOMER of an impairment or outage materially affecting service.
 - 7.5 CUSTOMER shall be charged with any false maintenance call outs at the standard LADWP rate in effect at the time services are performed. The LADWP's rates in effect at the time of execution of this IRU-02 Agreement are set forth in IRU-02 Exhibit E – Maintenance and Repair and are subject to change.
8. The LADWP will grant a credit allowance for service interruption calculated and credited in One (1) hour increments. A service interruption will be deemed to have occurred only if:
- 8.1 Service becomes unusable to CUSTOMER as a result of failure of LADWP equipment, facilities, or personnel used to provide the service; and
 - 8.2 The interruption is not the result of:
 - 8.2.1 The negligence or acts of CUSTOMER or its agents, employees, suppliers, or contractors;
 - 8.2.2 The failure or malfunction of non-LADWP equipment, facilities, or system;
 - 8.2.3 Any circumstances or causes beyond the control of the LADWP; or
 - 8.2.4 A service interruption caused by scheduled maintenance, alteration, or completion of such maintenance or alteration beyond normal time requirements.
 - 8.3 Such credits will accumulate during a calendar year and be credited against the CUSTOMER invoiced service charge (IRU-02 Exhibit B) for the next year and will apply only to those segments experiencing the service interruption, except for the final year of the term of this IRU-02 Agreement, in which LADWP will directly reimburse CUSTOMER for any service interruption credits.
9. This IRU-02 Agreement, including Exhibits A, B, C, D, E, F, and G, which are attached, are hereby incorporated into the Master Agreement, and all of which constitutes the entire agreement between the Parties with respect to the subject matter. This IRU-02 Agreement cannot be modified except in writing signed by both Parties.

10. Governing Law: This IRU-02 Agreement was made and entered into in the City of Los Angeles and shall be governed by, interpreted and enforced in accordance with the laws of the State of California and the City of Los Angeles, without regard to conflict of law principles.
11. Venue: All litigation arising out of, or relating to this IRU-02 Agreement, shall be brought in a State or Federal court in the County of Los Angeles in the State of California. The Parties irrevocably agree to submit to the exclusive jurisdiction of such courts in the State of California and waive any defense of forum non conveniens.
12. Price Adjustment: This IRU-02 Agreement and any extensions thereto shall be subject to a market rate adjustment after the initial term of this IRU-02 Agreement and thereafter at such time of each extension. The LADWP shall have sole discretion on the chosen valuation methodology for calculating and implementing this market rate adjustment. Extension shall include the yearly renewal of this IRU-02 Agreement, both automatic renewal or the exercise of an option to renew.
13. Each Party was represented by legal counsel during the negotiation and execution of this IRU-02 Agreement and each Party will be responsible for its own attorney fees and costs in any relevant litigation.

IN WITNESS WHEREOF, the Parties hereto have caused this Short Form IRU-02 Lease Agreement No. FO-743-02/2014 to be executed by their authorized representatives on the day and year written above.

DEPARTMENT OF WATER AND POWER
OF THE CITY OF LOS ANGELES BY
BOARD OF WATER AND POWER COMMISSIONERS
OF THE CITY OF LOS ANGELES

APPROVED AS TO FORM AND LEGALITY
MICHAEL N. FEUER, CITY ATTORNEY

APR 14 2014
BY *SD Driscoll*
SYNDI DRISCOLL
DEPUTY CITY ATTORNEY

By: _____
MARCIE L. EDWARDS
General Manager

Date: _____

And: _____
BARBARA E. MOSCHOS
Secretary

NBC UNIVERSAL, INC.

By: *[Signature]*
Title: Director, Data centers
Date: 4/3/2014

IRU-02 EXHIBIT A
APPROVED OPTICAL FIBER CIRCUITS AND
BUILDING/PREMISE OPTICAL FIBER ENTRIES

A.1 Circuit connections and building entry:

CONNECTION	NUMBER OF STRANDS	CIRCUIT ID
Location A: Building 2220 100 Universal City Plaza Universal City, California Location B: 600 West 7th Street Los Angeles, California	2	LL00706

IRU-02 EXHIBIT B
SUMMARY IRU-02/AGREEMENT INVOICE

This Summary IRU-02/Agreement Invoice provides a summary of all transactions of the Short Form IRU-02 Lease Agreement No. FO-743-02/2014.

A.1 Fiber Charges:

Item	Description	IRU-02 Fees
1.0	Annual Recurring Fiber:	
1.1	Two (2) single mode optical fibers originating at a demarcation splice or breakout point located at the Building 2220, 100 Universal City Plaza, Universal City, and terminating at a demarcation splice or breakout point at the 600 West 7 th Street, Los Angeles.	\$59,040.00
2.0	Annual Recurring Building Entries:	
2.1	Building/Premise Entry at Building 2220, 100 Universal City Plaza Universal City, California for two (2) fibers	\$2,400.00
2.2	Building/Premise Entry at 600 West 7 th Street Los Angeles, California for two (2) fibers	\$8,400.00
	Subtotal:	\$69,840.00
	6% Volume Discount:	(\$4,190.40)
	5% Loyalty Discount:	(\$3,492.00)
	5% Term Discount:	(\$3,492.00)
	Total Annual Recurring Charge:	\$58,665.60
3.0	Non-Recurring Charge:	Not Applicable

A.2 Invoicing and Payments:

CUSTOMER's initial bill shall include the Annual Recurring Charge, prorated through the end of the calendar year, and the Non-Recurring Charge, as summarized herein. Payment of such charges shall be due in full within Forty-five (45) days of date of invoice.

The Annual Recurring Fee shall be payable in advance by the 15th day of January of each year of the Term of this IRU-02 Agreement; provided, however, that no such Recurring Fee shall be due for a segment that has not yet successfully completed the Acceptance Testing procedures set forth in IRU-02 Exhibit F – Acceptance Testing Plan.

The last Recurring Fee shall be prorated through the Term expiration date and shall be payable in advance by the 15th day of January of the expiry year.

NOTE: Transactions invoiced reflects the services purchased from the LADWP by the CUSTOMER and shall be the amount due the LADWP upon CUSTOMER acceptance. This invoice reflects no federal, state or local taxes. Taxes, as appropriate, shall be added or invoiced separately.

IRU-02 EXHIBIT C
FIBER SYSTEM
ONE-TIME CONNECT/DISCONNECT/REARRANGE CHARGES

I. General

This one-time service connection charges shall apply for the initial establishment and cutover of a CUSTOMER's point-to-point CABLE SYSTEM or distribution CABLE SYSTEM (ring or segment). The CUSTOMER shall pay for all services added or deleted, or rearranged subsequent to the cutover date and shall pay for all connection services.

II. Building Service

The following one-time charges apply for the addition or deletion of building service to/from a CUSTOMER's point-to-point or distribution CABLE SYSTEM and for all building service connections. These are based on the number of building entry fibers involved in the service. Connection is required both in-building and in-street:

A. <u>Service Addition</u>		
	<u>Fiber Count</u>	<u>Charge/Fiber</u>
1.	0 – 6	\$ 400
2.	7 – 12	\$ 250
3.	13 – Up	\$ 150
B. <u>Service Deletion</u>		
	<u>Fiber Count</u>	<u>Charge/Fiber</u>
1.	0 – 6	\$ 200
2.	7 – 12	\$ 125
3.	13 – Up	\$ 75

III. Network Service

The CUSTOMER may choose to establish a network connection to the LADWP's CABLE SYSTEM at a demarcation point in a LADWP maintenance hole or other off-premises location rather than within a building or on building grounds. Such network connection may involve either a distribution system or a point-to-point system. The following one-time charges apply to all network service connections and to all additions

or deletions of network service after initial implementation and acceptance (including all final service terminations):

A.	<u>Service Addition</u>	
	<u>Fiber Count</u>	<u>Charge/Fiber</u>
	1. 0 – 6	\$ 400
	2. 7 – 12	\$ 250
	3. 13 – Up	\$ 150
B.	<u>Service Deletion</u>	
	<u>Fiber Count</u>	<u>Charge/Fiber</u>
	1. 0 – 6	\$ 200
	2. 7 – 12	\$ 125
	3. 13 – Up	\$ 75

IV. Other

For services such as adding a new ring, adding or changing a concentrator location, rearranging multiple service connections, and rearranging a ring(s), the CUSTOMER shall submit a request and service description to the LADWP. The LADWP shall return to the CUSTOMER a cost estimate for the necessary work and materials within Thirty (30) days of receipt of the service request. The LADWP's charge to the CUSTOMER shall be based on time and materials and overhead involved plus a Fifteen (15) percent surcharge.

IRU-02 EXHIBIT D
CABLE SYSTEM SPECIFICATIONS

I. General

The LADWP shall install and maintain the CUSTOMER SYSTEM within the LADWP's CABLE SYSTEM in accordance with the criteria and specifications that follows:

II. Design Criteria

The LADWP will endeavor to keep the number of splices in a span to a minimum.

III. Optical Fiber Specifications

The LADWP will meet the optical specifications as detailed below for all new cable installed:

A. Single Node Fiber

<u>Parameter</u>	<u>Specifications</u>	<u>Units</u>
Maximum Attenuation, 1310 nm	0.50	dB/Km
Maximum Attenuation, 1550 nm	0.40	dB/Km
Cladding Diameter	125 ± 3	μm
Cutoff Wavelength	1250 ± 100	nm
Zero Dispersion Wavelength	1310 ± 12	nm
Maximum Dispersion, (1285-1330 nm)	3.5	ps/(nm-Km)

B. Multimode Fiber

<u>Parameter</u>	<u>Specifications</u>	<u>Units</u>
Maximum Attenuation, 850 nm	3.75	dB/Km
Maximum Attenuation, 1300 nm	1.50	dB/Km
Cladding Diameter	125 ± 3	μm
Core Diameter	62.5	μm
Minimum Modal Bandwidth (850 nm)	160	MHz-km
(1310 nm)	500	MHz-km

IV. Splice Loss

Splice loss on LADWP cables will average less than or equal to 0.15 dB for all splices the LADWP makes under this IRU-02 Agreement. The 0.15 dB splice average will only apply to splices between cables of identical physical and optical properties (i.e., core and cladding dimensions refractive index and optical loss characteristics). All splices shall be measured using bi-directional methods and averages.

V. End-to-End Attenuation Test Criteria

The CUSTOMER SYSTEM will be tested at both wavelengths specified for the installed cable type as specified below unless otherwise stated in this IRU-02 Agreement:

Single-mode fiber - 1310 nm. and 1550 nm

Multimode fiber - 850 nm and 1300 nm

The End-to-End Attenuation Test criteria will be based on the following formula:

Maximum acceptable end-to-end attenuation =

$$(A \times Lx) + (0.15 \times Nsp) + C$$

Where:

A = Max. attenuation at each wavelength as specified in Section III above.

Lx = Installed length of cable in kilometers (km)

Nsp = Number of fiber splices in the CABLE SYSTEM

C = Connector/pigtail loss. The attenuation contribution of each pigtail with associated connector is considered to be 1.0 dB comprised of 0.85 dB connector loss and 0.15 dB splice loss (pigtail to OSP cable splice).

Therefore, C = 1.0 dB if the span is connectorized on one end and
2.0 dB if connectorized on both ends

The parameters above are guaranteed unless otherwise specified.

In the event that the fiber measured attenuation values change after the cable is installed and is degraded by 2.0 dB or greater than specified above, the LADWP will perform corrective maintenance pursuant to Exhibit E of this IRU-02 Agreement to attempt to restore the fiber to its original specified attenuation values.

VI. Analog Video

The LADWP will not warrant CUSTOMER analog video transmission within the foregoing system parameters.

IRU-02 EXHIBIT E
MAINTENANCE AND REPAIR

Charges for Time and Material Service

The LADWP shall perform maintenance service at the rates established below, which rates are subject to change. Unless specifically authorized by the CUSTOMER, no Scheduled Maintenance will be performed outside of normal working hours, detailed below:

<u>Normal Working Hours</u> 7:00 a.m. to 3:30 p.m., Monday through Friday (Except LADWP-observed holiday)	<u>Hourly Rate</u> \$ 85.00
<u>Overtime Hours</u> 6:00 a.m. to 7:00 a.m., and 3:30 p.m. to 12:00 midnight, Monday through Friday (Except LADWP-observed holiday)	\$ 105.00
<u>Holiday Hours and Special Call Out:</u> Any time during an LADWP-observed holiday or any time during a Saturday or Sunday, or any time between the hours of 12:00 midnight and 6:00 a.m., Monday through Friday	\$ 130.00

Charges will be made for travel time to the location where maintenance is to be performed. If maintenance carries over after 3:30 p.m. or any maintenance during holiday hours of special call out, charges will also be made for travel time from the said location. Charges will be for a minimum of Two (2) hours for normal and overtime hours and for a minimum of Four (4) hours for holiday hours and special call out.

LADWP Holiday Schedule:

New Year's Day	Labor Day
Martin Luther King, Jr. Day	Columbus Day (Observed)
Presidents' Day	Veterans Day (Observed)
Memorial Day (Observed)	Thanksgiving Day and Day After
Independence Day	Christmas Day

All rates, charges, and holiday schedule are subject to change.

IRU-02 EXHIBIT F
ACCEPTANCE TESTING PLAN
FIBER ACCEPTANCE TESTING PROCEDURES

The LADWP will conduct the following tests as part of its Acceptance Testing Plan:

1. Non-destructive Attenuation Test (End-to-End)
2. Optical Time Domain Reflectometer Tests (OTDR)

Fiber acceptance testing will be performed to ensure that the Customer Fiber Segments will operate within the parameters of the Specifications set forth in IRU-02 Exhibit D – Cable System Specifications.

More specifically, fiber acceptance testing will include the following:

1. Continuity/Uniformity Tests

All fibers shall be tested bi-directionally at 1310 nm or 1550 nm, as applicable, with an OTDR; the subsequent traces shall be inspected for End-to-End continuity and for uniform attenuation. These traces will be stored on diskette and will be compatible with Laser Precision PC-OTDR software.

2. Optical Length

The OTDR will be used to determine the end-to-end optical length of the cable where possible.

3. Splice Loss

Splice loss will be measured bi-directionally with an OPTDR using the Splice Loss Average method. The average acceptance splice loss shall be the measurement for splice loss set forth below.

4. End-to-End Loss

Using a light source and a power meter, the bi-directional, connector-to-connector attenuation will be measured for each fiber at 1310 nm and 1550 nm, as applicable. The acceptance average attenuation per kilometer shall be the attenuation set forth in IRU-02 Exhibit D – Cable System Specifications.

IRU-02 EXHIBIT F

LOS ANGELES DEPARTMENT OF WATER & POWER
FIBER OPTIC ENTERPRISE
ACCEPTANCE FORM

Agreement No.: _____
Demarcation Point 1: _____
Demarcation Point 2: _____
Company Name: _____
Address: _____

Customer Contact: _____
Phone: _____
Number of fibers: _____
Distance: _____
Attenuation Test
Results: Within contract specifications
OTDR Traces
Attached: OTDR traces
LADWP Contact: _____
Phone: _____

Special Notes: _____

System installation is complete and the
fibers are ready for normal service under
the care of LADWP maintenance
organization

Name [Signature]
Approved _____
Date 4/3/2014
Customer Representative

Name _____
Approved _____
LADWP Representative
Date _____

System is accepted for normal service
under care of customer operations and
maintenance organization

Name [Signature]
Approved _____
Date 4/3/2014
Customer Manager

Name _____
Approved _____
LADWP Manager
Date _____

IRU-02 EXHIBIT G

LOS ANGELES DEPARTMENT OF WATER & POWER
TROUBLE REPORTING PROCEDURE

The LADWP maintains its fiber optic network (CABLE SYSTEM) in accordance with industry standards. Should trouble with the service arise, please call the following number:

LADWP Telecommunications Trouble Number:
(213) 367-2225 (367-CABL) (24 hours)

This is the number of the LADWP's Voice Operations Center (VOC). The VOC will escalate continuing troubles to LADWP's management.

Upon clearance of the trouble, the VOC will notify the trouble-reporting location of clearance and reason for the trouble.

The LADWP shall be on site and begin investigating and correcting the reported condition within Four (4) hours of notification and will provide the Customer with progress reports at Four (4) hour intervals.

AGREEMENT NO. FO-744-02/2014
NBC UNIVERSAL, INC.
SHORT FORM IRU-03 LEASE AGREEMENT

This SHORT FORM IRU-03 LEASE AGREEMENT (hereinafter referred to as the "IRU-03 Agreement") is dated May 5, 2014, between the CITY OF LOS ANGELES, a California municipal corporation, acting by and through the DEPARTMENT OF WATER AND POWER (hereinafter referred to as the "LADWP" or "CITY OF LOS ANGELES") having its principal office at 111 North Hope Street, Los Angeles, California 90012, and NBC Universal, Inc. (hereinafter referred to as "CUSTOMER"), with its principal office at 100 Universal City Plaza, Universal City, California 91608-1002, and upon execution shall be a part of the CUSTOMER Optical Fiber Lease Agreement No. FO-741-02/2014 (Master Agreement) dated May 5, 2014.

WHEREAS, LADWP provides optical fiber strands and facilities in its Cable System (hereinafter referred to as "CABLE SYSTEM") for telephone, telecommunications, data, cable television or other video services, and CUSTOMER desires to use such CABLE SYSTEM components for its business in providing telephone, telecommunications, data, internet, cable television or other video services. The LADWP optical fiber strands and facilities used by CUSTOMER are identified in the Master Agreement as Customer Systems and likewise shall be referred to as "CUSTOMER SYSTEM" in this IRU-03 Agreement.

THEREFORE in consideration of the mutual agreements herein, the Parties mutually agree as follows:

1. The LADWP hereby grants to CUSTOMER an Indefeasible Right of Use (IRU) of the following LADWP CABLE SYSTEM components:
 - A. Optical fiber strands and Building/Premise Entry to buildings that are listed in the attached IRU-03 Exhibit A – Approved Optical Fiber Circuits and Building/Premise Optical Fiber Entries.

These individual LADWP CABLE SYSTEM components collectively shall be the CUSTOMER SYSTEM for this IRU-03 Agreement. The CUSTOMER SYSTEM shall be inclusive of the LADWP's fiber optic CABLE SYSTEM between and including the LADWP's sides of the originating and terminating demarcation points.

2. The LADWP will construct, install, and/or provide the CUSTOMER SYSTEM for CUSTOMER's use in accordance with the terms of the Master Agreement and this IRU-03 Agreement. The LADWP shall use reasonable efforts to comply with the project schedule that is mutually agreed by both Parties.
3. CUSTOMER's IRU in the CUSTOMER SYSTEM shall commence on May 5, 2014 and shall be valid for an initial term of Five (5) years. Thereafter this IRU-03 Agreement shall automatically renew each year up to the expiration date of the Master Agreement unless a notice to cancel is provided by the CUSTOMER Thirty (30) calendar days prior to expiration date of the initial term or renewal terms of this IRU-03 Agreement, provided that, the term of this IRU-03 Agreement shall not exceed the term of the Master Agreement, as may be amended from time to time. Subject to the terms and conditions of the Master Agreement, this IRU-03 Agreement shall continue until the term expires or until terminated as provided in Section 14.0 of the Master Agreement.
4. The LADWP shall provide the following items for the CUSTOMER SYSTEM Service:

- 4.1 Not Applicable.
5. CUSTOMER shall provide the following items for the CUSTOMER SYSTEM Service:
- 5.1 Not Applicable.
6. The payments and charges shall be in accordance with Section 7.0 of the Master Agreement and as specifically identified in the following subparagraphs:
- 6.1 Invoiced Charges
- 6.1.1 Invoiced charges are as stipulated in IRU-03 Exhibit B – Summary IRU/Agreement Invoice.
- 6.1.2 As included in IRU-03 Exhibit C – Fiber System One-Time Connect/Disconnect/Rearrange Charges, CUSTOMER shall pay one-time building or external network service connection and disconnection charges for each building service added or deleted after the initial establishment and acceptance of a CUSTOMER SYSTEM cable segment. One-time CUSTOMER service charges also apply if the CUSTOMER requires installation of a new distribution ring or concentrator in an already established CABLE SYSTEM or CUSTOMER SYSTEM distribution cable segment, rearrangement of existing service connections, and rearrangement of a ring or concentrator operation. The charges and application rules are identified in IRU-03 Exhibit C.
- 6.2 Billing and Notices
- 6.2.1 The LADWP shall send all notices and invoices to CUSTOMER at the following address:
- NBC Universal, Inc.
Attention: Mike Robledo
100 Universal City Plaza
Room 1360-04F32
Universal City, California 91608
Telephone: (818) 777-4205
Mobile: (818) 309-3612
Facsimile: (818) 866-1533
Email: Mike.Robledo@nbcuni.com
- 6.2.2 The LADWP acknowledges and agrees that any invoice sent to any other CUSTOMER address, without the prior written consent or direction of CUSTOMER, will not be deemed received by CUSTOMER until such misdirected invoice is actually received by CUSTOMER at the above address.
7. All maintenance and repair functions on the CUSTOMER SYSTEM and all facilities through which the CUSTOMER SYSTEM passes, including, but not limited to, conduit, innerduct, poles and equipment, shall be performed by the LADWP. CUSTOMER is prohibited from performing any work whatsoever on the CUSTOMER SYSTEM.
- 7.1 Section 4.0 of the Master Agreement applies.

- 7.2 The LADWP shall maintain the CUSTOMER SYSTEM pursuant to the specifications provided in IRU-03 Exhibit D – Cable System Specifications.
- 7.3 The LADWP shall provide to CUSTOMER a Twenty-Four (24) hour a day, trouble-reporting telephone number as shown in IRU-03 Exhibit G – Trouble Reporting Procedure. CUSTOMER shall provide to LADWP a Twenty-Four (24) hour a day trouble coordination telephone number.
- 7.4 Any impairment or outage reasonably suspected to be caused by CUSTOMER SYSTEM components on the LADWP's side of the demarcation point shall require a response from the LADWP. During CUSTOMER SYSTEM impairments or outages affecting CUSTOMER's service, LADWP shall keep CUSTOMER advised and updated. The LADWP's personnel shall respond within Four (4) hours from notification by CUSTOMER of an impairment or outage materially affecting service.
- 7.5 CUSTOMER shall be charged with any false maintenance call outs at the standard LADWP rate in effect at the time services are performed. The LADWP's rates in effect at the time of execution of this IRU-03 Agreement are set forth in IRU-03 Exhibit E – Maintenance and Repair and are subject to change.
8. The LADWP will grant a credit allowance for service interruption calculated and credited in One (1) hour increments. A service interruption will be deemed to have occurred only if:
- 8.1 Service becomes unusable to CUSTOMER as a result of failure of LADWP equipment, facilities, or personnel used to provide the service; and
- 8.2 The interruption is not the result of:
- 8.2.1 The negligence or acts of CUSTOMER or its agents, employees, suppliers, or contractors;
- 8.2.2 The failure or malfunction of non-LADWP equipment, facilities, or system;
- 8.2.3 Any circumstances or causes beyond the control of the LADWP; or
- 8.2.4 A service interruption caused by scheduled maintenance, alteration, or completion of such maintenance or alteration beyond normal time requirements.
- 8.3 Such credits will accumulate during a calendar year and be credited against the CUSTOMER invoiced service charge (IRU-03 Exhibit B) for the next year and will apply only to those segments experiencing the service interruption, except for the final year of the term of this IRU-03 Agreement, in which LADWP will directly reimburse CUSTOMER for any service interruption credits.
9. This IRU-03 Agreement, including Exhibits A, B, C, D, E, F, and G, which are attached, are hereby incorporated into the Master Agreement, and all of which constitutes the entire agreement between the Parties with respect to the subject matter. This IRU-03 Agreement cannot be modified except in writing signed by both Parties.

10. Governing Law: This IRU-03 Agreement was made and entered into in the City of Los Angeles and shall be governed by, interpreted and enforced in accordance with the laws of the State of California and the City of Los Angeles, without regard to conflict of law principles.
11. Venue: All litigation arising out of, or relating to this IRU-03 Agreement, shall be brought in a State or Federal court in the County of Los Angeles in the State of California. The Parties irrevocably agree to submit to the exclusive jurisdiction of such courts in the State of California and waive any defense of forum non conveniens.
12. Price Adjustment: This IRU-03 Agreement and any extensions thereto shall be subject to a market rate adjustment after the initial term of this IRU-03 Agreement and thereafter at such time of each extension. The LADWP shall have sole discretion on the chosen valuation methodology for calculating and implementing this market rate adjustment. Extension shall include the yearly renewal of this IRU-03 Agreement, both automatic renewal or the exercise of an option to renew.
13. Each Party was represented by legal counsel during the negotiation and execution of this IRU-03 Agreement and each Party will be responsible for its own attorney fees and costs in any relevant litigation.

IN WITNESS WHEREOF, the Parties hereto have caused this Short Form IRU-03 Lease Agreement No. FO-744-02/2014 to be executed by their authorized representatives on the day and year written above.

DEPARTMENT OF WATER AND POWER
OF THE CITY OF LOS ANGELES BY
BOARD OF WATER AND POWER COMMISSIONERS
OF THE CITY OF LOS ANGELES

APPROVED AS TO FORM AND LEGALITY
MICHAEL N. FEUER, CITY ATTORNEY

APR 14 2014
BY Syndi Driscoll
SYNDI DRISCOLL
DEPUTY CITY ATTORNEY

By: _____
MARCIE L. EDWARDS
General Manager

Date: _____

And: _____
BARBARA E. MOSCHOS
Secretary

NBC UNIVERSAL, INC.

By: [Signature]

Title: Director, Data Centers

Date: 4/3/2014

IRU-03 EXHIBIT A
APPROVED OPTICAL FIBER CIRCUITS AND
BUILDING/PREMISE OPTICAL FIBER ENTRIES

A.1 Circuit connections and building entry:

CONNECTION	NUMBER OF STRANDS	CIRCUIT ID
Location A: Building 2220 100 Universal City Plaza Universal City, California Location B: 818 West 7th Street Los Angeles, California	2	LL00710

IRU-03 EXHIBIT B
SUMMARY IRU-03/AGREEMENT INVOICE

This Summary IRU-03/Agreement Invoice provides a summary of all transactions of the Short Form IRU-03 Lease Agreement No. FO-744-02/2014.

A.1 Fiber Charges:

Item	Description	IRU-03 Fees
1.0	Annual Recurring Fiber:	
1.1	Two (2) single mode optical fibers originating at a demarcation splice or breakout point located at the Building 2220, 100 Universal City Plaza, Universal City, and terminating at a demarcation splice or breakout point at the 818 West 7 th Street, Los Angeles.	\$59,040.00
2.0	Annual Recurring Building Entries:	
2.1	Building/Premise Entry at Building 2220, 100 Universal City Plaza Universal City, California for two (2) fibers	\$2,400.00
2.2	Building/Premise Entry at 818 West 7 th Street Los Angeles, California for two (2) fibers	\$8,400.00
	Subtotal:	\$69,840.00
	6% Volume Discount:	(\$4,190.40)
	5% Loyalty Discount:	(\$3,492.00)
	5% Term Discount:	(\$3,492.00)
	Total Annual Recurring Charge:	\$58,665.60
3.0	Non-Recurring Charge:	Not Applicable

A.2 Invoicing and Payments:

CUSTOMER's initial bill shall include the Annual Recurring Charge, prorated through the end of the calendar year, and the Non-Recurring Charge, as summarized herein. Payment of such charges shall be due in full within Forty-five (45) days of date of invoice.

The Annual Recurring Fee shall be payable in advance by the 15th day of January of each year of the Term of this IRU-03 Agreement; provided, however, that no such Recurring Fee shall be due for a segment that has not yet successfully completed the Acceptance Testing procedures set forth in IRU-03 Exhibit F – Acceptance Testing Plan.

The last Recurring Fee shall be prorated through the Term expiration date and shall be payable in advance by the 15th day of January of the expiry year.

NOTE: Transactions invoiced reflects the services purchased from the LADWP by the CUSTOMER and shall be the amount due the LADWP upon CUSTOMER acceptance. This invoice reflects no federal, state or local taxes. Taxes, as appropriate, shall be added or invoiced separately.

IRU-03 EXHIBIT C
FIBER SYSTEM
ONE-TIME CONNECT/DISCONNECT/REARRANGE CHARGES

I. General

This one-time service connection charges shall apply for the initial establishment and cutover of a CUSTOMER's point-to-point CABLE SYSTEM or distribution CABLE SYSTEM (ring or segment). The CUSTOMER shall pay for all services added or deleted, or rearranged subsequent to the cutover date and shall pay for all connection services.

II. Building Service

The following one-time charges apply for the addition or deletion of building service to/from a CUSTOMER's point-to-point or distribution CABLE SYSTEM and for all building service connections. These are based on the number of building entry fibers involved in the service. Connection is required both in-building and in-street:

A. <u>Service Addition</u>		
	<u>Fiber Count</u>	<u>Charge/Fiber</u>
1.	0 – 6	\$ 400
2.	7 – 12	\$ 250
3.	13 – Up	\$ 150
B. <u>Service Deletion</u>		
	<u>Fiber Count</u>	<u>Charge/Fiber</u>
1.	0 – 6	\$ 200
2.	7 – 12	\$ 125
3.	13 – Up	\$ 75

III. Network Service

The CUSTOMER may choose to establish a network connection to the LADWP's CABLE SYSTEM at a demarcation point in a LADWP maintenance hole or other off-premises location rather than within a building or on building grounds. Such network connection may involve either a distribution system or a point-to-point system. The following one-time charges apply to all network service connections and to all additions

or deletions of network service after initial implementation and acceptance (including all final service terminations):

A.	<u>Service Addition</u>	
	<u>Fiber Count</u>	<u>Charge/Fiber</u>
	1. 0 – 6	\$ 400
	2. 7 – 12	\$ 250
	3. 13 – Up	\$ 150
B.	<u>Service Deletion</u>	
	<u>Fiber Count</u>	<u>Charge/Fiber</u>
	1. 0 – 6	\$ 200
	2. 7 – 12	\$ 125
	3. 13 – Up	\$ 75

IV. Other

For services such as adding a new ring, adding or changing a concentrator location, rearranging multiple service connections, and rearranging a ring(s), the CUSTOMER shall submit a request and service description to the LADWP. The LADWP shall return to the CUSTOMER a cost estimate for the necessary work and materials within Thirty (30) days of receipt of the service request. The LADWP's charge to the CUSTOMER shall be based on time and materials and overhead involved plus a Fifteen (15) percent surcharge.

IRU-03 EXHIBIT D
CABLE SYSTEM SPECIFICATIONS

I. General

The LADWP shall install and maintain the CUSTOMER SYSTEM within the LADWP's CABLE SYSTEM in accordance with the criteria and specifications that follows:

II. Design Criteria

The LADWP will endeavor to keep the number of splices in a span to a minimum.

III. Optical Fiber Specifications

The LADWP will meet the optical specifications as detailed below for all new cable installed:

A. Single Node Fiber

<u>Parameter</u>	<u>Specifications</u>	<u>Units</u>
Maximum Attenuation, 1310 nm	0.50	dB/Km
Maximum Attenuation, 1550 nm	0.40	dB/Km
Cladding Diameter	125 ± 3	µm
Cutoff Wavelength	1250 ± 100	nm
Zero Dispersion Wavelength	1310 ± 12	nm
Maximum Dispersion, (1285-1330 nm)	3.5	ps/(nm-Km)

B. Multimode Fiber

<u>Parameter</u>	<u>Specifications</u>	<u>Units</u>
Maximum Attenuation, 850 nm	3.75	dB/Km
Maximum Attenuation, 1300 nm	1.50	dB/Km
Cladding Diameter	125 ± 3	µm
Core Diameter	62.5	µm
Minimum Modal Bandwidth (850 nm)	160	MHz-km
(1310 nm)	500	MHz-km

IV. Splice Loss

Splice loss on LADWP cables will average less than or equal to 0.15 dB for all splices the LADWP makes under this IRU-03 Agreement. The 0.15 dB splice average will only apply to splices between cables of identical physical and optical properties (i.e., core and cladding dimensions refractive index and optical loss characteristics). All splices shall be measured using bi-directional methods and averages.

V. End-to-End Attenuation Test Criteria

The CUSTOMER SYSTEM will be tested at both wavelengths specified for the installed cable type as specified below unless otherwise stated in this IRU-03 Agreement:

Single-mode fiber - 1310 nm. and 1550 nm

Multimode fiber - 850 nm and 1300 nm

The End-to-End Attenuation Test criteria will be based on the following formula:

Maximum acceptable end-to-end attenuation =

$$(A \times Lx) + (0.15 \times Nsp) + C$$

Where:

A = Max. attenuation at each wavelength as specified in Section III above.

Lx = Installed length of cable in kilometers (km)

Nsp = Number of fiber splices in the CABLE SYSTEM

C = Connector/pigtail loss. The attenuation contribution of each pigtail with associated connector is considered to be 1.0 dB comprised of 0.85 dB connector loss and 0.15 dB splice loss (pigtail to OSP cable splice):

Therefore, C = 1.0 dB if the span is connectorized on one end and
2.0 dB if connectorized on both ends

The parameters above are guaranteed unless otherwise specified.

In the event that the fiber measured attenuation values change after the cable is installed and is degraded by 2.0 dB or greater than specified above, the LADWP will perform corrective maintenance pursuant to Exhibit E of this IRU-03 Agreement to attempt to restore the fiber to its original specified attenuation values.

VI. Analog Video

The LADWP will not warrant CUSTOMER analog video transmission within the foregoing system parameters.

IRU-03 EXHIBIT E
MAINTENANCE AND REPAIR

Charges for Time and Material Service

The LADWP shall perform maintenance service at the rates established below, which rates are subject to change. Unless specifically authorized by the CUSTOMER, no Scheduled Maintenance will be performed outside of normal working hours, detailed below:

<u>Normal Working Hours</u> 7:00 a.m. to 3:30 p.m., Monday through Friday (Except LADWP-observed holiday)	<u>Hourly Rate</u> \$ 85.00
<u>Overtime Hours</u> 6:00 a.m. to 7:00 a.m., and 3:30 p.m. to 12:00 midnight, Monday through Friday (Except LADWP-observed holiday)	\$ 105.00
<u>Holiday Hours and Special Call Out:</u> Any time during an LADWP-observed holiday or any time during a Saturday or Sunday, or any time between the hours of 12:00 midnight and 6:00 a.m., Monday through Friday	\$ 130.00

Charges will be made for travel time to the location where maintenance is to be performed. If maintenance carries over after 3:30 p.m. or any maintenance during holiday hours of special call out, charges will also be made for travel time from the said location. Charges will be for a minimum of Two (2) hours for normal and overtime hours and for a minimum of Four (4) hours for holiday hours and special call out.

LADWP Holiday Schedule:

New Year's Day
Martin Luther King, Jr. Day
Presidents' Day
Memorial Day (Observed)
Independence Day

Labor Day
Columbus Day (Observed)
Veterans Day (Observed)
Thanksgiving Day and Day After
Christmas Day

All rates, charges, and holiday schedule are subject to change.

IRU-03 EXHIBIT F
ACCEPTANCE TESTING PLAN
FIBER ACCEPTANCE TESTING PROCEDURES

The LADWP will conduct the following tests as part of its Acceptance Testing Plan:

1. Non-destructive Attenuation Test (End-to-End)
2. Optical Time Domain Reflectometer Tests (OTDR)

Fiber acceptance testing will be performed to ensure that the Customer Fiber Segments will operate within the parameters of the Specifications set forth in IRU-03 Exhibit D – Cable System Specifications.

More specifically, fiber acceptance testing will include the following:

1. Continuity/Uniformity Tests

All fibers shall be tested bi-directionally at 1310 nm or 1550 nm, as applicable, with an OTDR; the subsequent traces shall be inspected for End-to-End continuity and for uniform attenuation. These traces will be stored on diskette and will be compatible with Laser Precision PC-OTDR software.

2. Optical Length

The OTDR will be used to determine the end-to-end optical length of the cable where possible.

3. Splice Loss

Splice loss will be measured bi-directionally with an OPTDR using the Splice Loss Average method. The average acceptance splice loss shall be the measurement for splice loss set forth below.

4. End-to-End Loss

Using a light source and a power meter, the bi-directional, connector-to-connector attenuation will be measured for each fiber at 1310 nm and 1550 nm, as applicable. The acceptance average attenuation per kilometer shall be the attenuation set forth in IRU-03 Exhibit D – Cable System Specifications.

IRU-03 EXHIBIT F

LOS ANGELES DEPARTMENT OF WATER & POWER
FIBER OPTIC ENTERPRISE
ACCEPTANCE FORM

Agreement No.: _____
Demarcation Point 1: _____
Demarcation Point 2: _____
Company Name: _____
Address: _____

Customer Contact: _____
Phone: _____
Number of fibers: _____
Distance: _____
Attenuation Test
Results: Within contract specifications
OTDR Traces
Attached: OTDR traces
LADWP Contact: _____
Phone: _____

Special Notes: _____

System installation is complete and the
fibers are ready for normal service under
the care of LADWP maintenance
organization

Name _____
Approved _____
Customer Representative
Date 4/3/2014

Name _____
Approved _____
LADWP Representative
Date _____

System is accepted for normal service
under care of customer operations and
maintenance organization

Name _____
Approved _____
Customer Manager
Date 4/3/2014

Name _____
Approved _____
LADWP Manager
Date _____

IRU-03 EXHIBIT G

LOS ANGELES DEPARTMENT OF WATER & POWER
TROUBLE REPORTING PROCEDURE

The LADWP maintains its fiber optic network (CABLE SYSTEM) in accordance with industry standards. Should trouble with the service arise, please call the following number:

**LADWP Telecommunications Trouble Number:
(213) 367-2225 (367-CABL) (24 hours)**

This is the number of the LADWP's Voice Operations Center (VOC). The VOC will escalate continuing troubles to LADWP's management.

Upon clearance of the trouble, the VOC will notify the trouble-reporting location of clearance and reason for the trouble.

The LADWP shall be on site and begin investigating and correcting the reported condition within Four (4) hours of notification and will provide the Customer with progress reports at Four (4) hour intervals.

AGREEMENT NO. FO-745-02/2014
NBC UNIVERSAL, INC.
SHORT FORM IRU-04 LEASE AGREEMENT

This SHORT FORM IRU-04 LEASE AGREEMENT (hereinafter referred to as the "IRU-04 Agreement") is dated May 5, 2014, between the CITY OF LOS ANGELES, a California municipal corporation, acting by and through the DEPARTMENT OF WATER AND POWER (hereinafter referred to as the "LADWP" or "CITY OF LOS ANGELES") having its principal office at 111 North Hope Street, Los Angeles, California 90012, and NBC Universal, Inc. (hereinafter referred to as "CUSTOMER"), with its principal office at 100 Universal City Plaza, Universal City, California 91608-1002, and upon execution shall be a part of the CUSTOMER Optical Fiber Lease Agreement No. FO-741-02/2014 (Master Agreement) dated May 5, 2014.

WHEREAS, LADWP provides optical fiber strands and facilities in its Cable System (hereinafter referred to as "CABLE SYSTEM") for telephone, telecommunications, data, cable television or other video services, and CUSTOMER desires to use such CABLE SYSTEM components for its business in providing telephone, telecommunications, data, internet, cable television or other video services. The LADWP optical fiber strands and facilities used by CUSTOMER are identified in the Master Agreement as Customer Systems and likewise shall be referred to as "CUSTOMER SYSTEM" in this IRU-04 Agreement.

THEREFORE in consideration of the mutual agreements herein, the Parties mutually agree as follows:

1. The LADWP hereby grants to CUSTOMER an Indefeasible Right of Use (IRU) of the following LADWP CABLE SYSTEM components:
 - A. Optical fiber strands and Building/Premise Entry to buildings that are listed in the attached IRU-04 Exhibit A – Approved Optical Fiber Circuits and Building/Premise Optical Fiber Entries.

These individual LADWP CABLE SYSTEM components collectively shall be the CUSTOMER SYSTEM for this IRU-04 Agreement. The CUSTOMER SYSTEM shall be inclusive of the LADWP's fiber optic CABLE SYSTEM between and including the LADWP's sides of the originating and terminating demarcation points.

2. The LADWP will construct, install, and/or provide the CUSTOMER SYSTEM for CUSTOMER's use in accordance with the terms of the Master Agreement and this IRU-04 Agreement. The LADWP shall use reasonable efforts to comply with the project schedule that is mutually agreed by both Parties.
3. CUSTOMER's IRU in the CUSTOMER SYSTEM shall commence on May 5, 2014 and shall be valid for an initial term of Five (5) years. Thereafter this IRU-04 Agreement shall automatically renew each year up to the expiration date of the Master Agreement unless a notice to cancel is provided by the CUSTOMER Thirty (30) calendar days prior to expiration date of the initial term or renewal terms of this IRU-04 Agreement, provided that, the term of this IRU-04 Agreement shall not exceed the term of the Master Agreement, as may be amended from time to time. Subject to the terms and conditions of the Master Agreement, this IRU-04 Agreement shall continue until the term expires or until terminated as provided in Section 14.0 of the Master Agreement.
4. The LADWP shall provide the following items for the CUSTOMER SYSTEM Service:

- 4.1 Not Applicable.
- 5. CUSTOMER shall provide the following items for the CUSTOMER SYSTEM Service:
 - 5.1 Not Applicable.
- 6. The payments and charges shall be in accordance with Section 7.0 of the Master Agreement and as specifically identified in the following subparagraphs:
 - 6.1 Invoiced Charges
 - 6.1.1 Invoiced charges are as stipulated in IRU-04 Exhibit B – Summary IRU/Agreement Invoice.
 - 6.1.2 As included in IRU-04 Exhibit C – Fiber System One-Time Connect/Disconnect/Rearrange Charges, CUSTOMER shall pay one-time building or external network service connection and disconnection charges for each building service added or deleted after the initial establishment and acceptance of a CUSTOMER SYSTEM cable segment. One-time CUSTOMER service charges also apply if the CUSTOMER requires installation of a new distribution ring or concentrator in an already established CABLE SYSTEM or CUSTOMER SYSTEM distribution cable segment, rearrangement of existing service connections, and rearrangement of a ring or concentrator operation. The charges and application rules are identified in IRU-04 Exhibit C.
 - 6.2 Billing and Notices
 - 6.2.1 The LADWP shall send all notices and invoices to CUSTOMER at the following address:

NBC Universal, Inc.
Attention: Matthew Grzywacz
Senior Financial Analyst
30 Rockefeller Plaza
New York, New York 10112
Telephone: (212) 664-6865
Email: Matthew.Grzywacz@nbcuni.com
 - 6.2.2 The LADWP acknowledges and agrees that any invoice sent to any other CUSTOMER address, without the prior written consent or direction of CUSTOMER, will not be deemed received by CUSTOMER until such misdirected invoice is actually received by CUSTOMER at the above address.
- 7. All maintenance and repair functions on the CUSTOMER SYSTEM and all facilities through which the CUSTOMER SYSTEM passes, including, but not limited to, conduit, innerduct, poles and equipment, shall be performed by the LADWP. CUSTOMER is prohibited from performing any work whatsoever on the CUSTOMER SYSTEM.
 - 7.1 Section 4.0 of the Master Agreement applies.

- 7.2 The LADWP shall maintain the CUSTOMER SYSTEM pursuant to the specifications provided in IRU-04 Exhibit D – Cable System Specifications.
- 7.3 The LADWP shall provide to CUSTOMER a Twenty-Four (24) hour a day, trouble-reporting telephone number as shown in IRU-04 Exhibit G – Trouble Reporting Procedure. CUSTOMER shall provide to LADWP a Twenty-Four (24) hour a day trouble coordination telephone number.
- 7.4 Any impairment or outage reasonably suspected to be caused by CUSTOMER SYSTEM components on the LADWP's side of the demarcation point shall require a response from the LADWP. During CUSTOMER SYSTEM impairments or outages affecting CUSTOMER's service, LADWP shall keep CUSTOMER advised and updated. The LADWP's personnel shall respond within Four (4) hours from notification by CUSTOMER of an impairment or outage materially affecting service.
- 7.5 CUSTOMER shall be charged with any false maintenance call outs at the standard LADWP rate in effect at the time services are performed. The LADWP's rates in effect at the time of execution of this IRU-04 Agreement are set forth in IRU-04 Exhibit E – Maintenance and Repair and are subject to change.
8. The LADWP will grant a credit allowance for service interruption calculated and credited in One (1) hour increments. A service interruption will be deemed to have occurred only if:
 - 8.1 Service becomes unusable to CUSTOMER as a result of failure of LADWP equipment, facilities, or personnel used to provide the service; and
 - 8.2 The interruption is not the result of:
 - 8.2.1 The negligence or acts of CUSTOMER or its agents, employees, suppliers, or contractors;
 - 8.2.2 The failure or malfunction of non-LADWP equipment, facilities, or system;
 - 8.2.3 Any circumstances or causes beyond the control of the LADWP; or
 - 8.2.4 A service interruption caused by scheduled maintenance, alteration, or completion of such maintenance or alteration beyond normal time requirements.
 - 8.3 Such credits will accumulate during a calendar year and be credited against the CUSTOMER invoiced service charge (IRU-04 Exhibit B) for the next year and will apply only to those segments experiencing the service interruption, except for the final year of the term of this IRU-04 Agreement, in which LADWP will directly reimburse CUSTOMER for any service interruption credits.
9. This IRU-04 Agreement, including Exhibits A, B, C, D, E, F, and G, which are attached, are hereby incorporated into the Master Agreement, and all of which constitutes the entire agreement between the Parties with respect to the subject matter. This IRU-04 Agreement cannot be modified except in writing signed by both Parties.

10. Governing Law: This IRU-04 Agreement was made and entered into in the City of Los Angeles and shall be governed by, interpreted and enforced in accordance with the laws of the State of California and the City of Los Angeles, without regard to conflict of law principles.
11. Venue: All litigation arising out of, or relating to this IRU-04 Agreement, shall be brought in a State or Federal court in the County of Los Angeles in the State of California. The Parties irrevocably agree to submit to the exclusive jurisdiction of such courts in the State of California and waive any defense of forum non conveniens.
12. Price Adjustment: This IRU-04 Agreement and any extensions thereto shall be subject to a market rate adjustment after the initial term of this IRU-04 Agreement and thereafter at such time of each extension. The LADWP shall have sole discretion on the chosen valuation methodology for calculating and implementing this market rate adjustment. Extension shall include the yearly renewal of this IRU-04 Agreement, both automatic renewal or the exercise of an option to renew.
13. Each Party was represented by legal counsel during the negotiation and execution of this IRU-04 Agreement and each Party will be responsible for its own attorney fees and costs in any relevant litigation.

IN WITNESS WHEREOF, the Parties hereto have caused this Short Form IRU-04 Lease Agreement No. FO-745-02/2014 to be executed by their authorized representatives on the day and year written above.

DEPARTMENT OF WATER AND POWER
OF THE CITY OF LOS ANGELES BY
BOARD OF WATER AND POWER COMMISSIONERS
OF THE CITY OF LOS ANGELES

APPROVED AS TO FORM AND LEGALITY
MICHAEL N. FEUER, CITY ATTORNEY

APR 14 2014
BY *Syndi Driscoll*
SYNDI DRISCOLL
DEPUTY CITY ATTORNEY

By: _____
MARCIE L. EDWARDS
General Manager

Date: _____

And: _____
BARBARA E. MOSCHOS
Secretary

NBC UNIVERSAL, INC.

By: *Charmo*
Title: Director, Data Centers
Date: 4/3/2014

IRU-04 EXHIBIT A
APPROVED OPTICAL FIBER CIRCUITS AND
BUILDING/PREMISE OPTICAL FIBER ENTRIES

A.1 Circuit connections and building entry:

CONNECTION	NUMBER OF STRANDS	CIRCUIT ID
Location A: LADWP IS-2190 5750 Wilshire Boulevard Los Angeles, California Location B: 600 West 7th Street Los Angeles, California	2	LL00610

IRU-04 EXHIBIT B
SUMMARY IRU-04/AGREEMENT INVOICE

This Summary IRU-04/Agreement Invoice provides a summary of all transactions of the Short Form IRU-04 Lease Agreement No. FO-745-02/2014.

A.1 Fiber Charges:

Item	Description	IRU-04 Fees
1.0	Annual Recurring Fiber:	
1.1	Two (2) single mode optical fibers originating at a demarcation splice or breakout point located at the LADWP IS-2190, 5750 Wilshire Boulevard, Los Angeles, and terminating at a demarcation splice or breakout point at the 600 West 7 th Street, Los Angeles.	\$69,600.00
2.0	Annual Recurring Building Entries:	
2.1	Building/Premise Entry at LADWP IS-2190 5750 Wilshire Boulevard Los Angeles, California for two (2) fibers	\$2,400.00
2.2	Building/Premise Entry at 600 West 7 th Street Los Angeles, California for two (2) fibers	\$8,400.00
	Subtotal:	\$80,400.00
	6% Volume Discount:	(\$4,824.00)
	5% Loyalty Discount:	(\$4,020.00)
	5% Term Discount:	(\$4,020.00)
	Total Annual Recurring Charge:	\$67,536.00
3.0	Non-Recurring Charge:	Not Applicable

A.2 Invoicing and Payments:

CUSTOMER's initial bill shall include the Annual Recurring Charge, prorated through the end of the calendar year, and the Non-Recurring Charge, as summarized herein. Payment of such charges shall be due in full within Forty-five (45) days of date of invoice.

The Annual Recurring Fee shall be payable in advance by the 15th day of January of each year of the Term of this IRU-04 Agreement; provided, however, that no such Recurring Fee shall be due for a segment that has not yet successfully completed the Acceptance Testing procedures set forth in IRU-04 Exhibit F – Acceptance Testing Plan.

The last Recurring Fee shall be prorated through the Term expiration date and shall be payable in advance by the 15th day of January of the expiry year.

NOTE: Transactions invoiced reflects the services purchased from the LADWP by the CUSTOMER and shall be the amount due the LADWP upon CUSTOMER acceptance. This invoice reflects no federal, state or local taxes. Taxes, as appropriate, shall be added or invoiced separately.

IRU-04 EXHIBIT C
FIBER SYSTEM
ONE-TIME CONNECT/DISCONNECT/REARRANGE CHARGES

I. General

This one-time service connection charges shall apply for the initial establishment and cutover of a CUSTOMER's point-to-point CABLE SYSTEM or distribution CABLE SYSTEM (ring or segment). The CUSTOMER shall pay for all services added or deleted, or rearranged subsequent to the cutover date and shall pay for all connection services.

II. Building Service

The following one-time charges apply for the addition or deletion of building service to/from a CUSTOMER's point-to-point or distribution CABLE SYSTEM and for all building service connections. These are based on the number of building entry fibers involved in the service. Connection is required both in-building and in-street:

A.	<u>Service Addition</u>	
	<u>Fiber Count</u>	<u>Charge/Fiber</u>
	1. 0 – 6	\$ 400
	2. 7 – 12	\$ 250
	3. 13 – Up	\$ 150
B.	<u>Service Deletion</u>	
	<u>Fiber Count</u>	<u>Charge/Fiber</u>
	1. 0 – 6	\$ 200
	2. 7 – 12	\$ 125
	3. 13 – Up	\$ 75

III. Network Service

The CUSTOMER may choose to establish a network connection to the LADWP's CABLE SYSTEM at a demarcation point in a LADWP maintenance hole or other off-premises location rather than within a building or on building grounds. Such network connection may involve either a distribution system or a point-to-point system. The following one-time charges apply to all network service connections and to all additions

or deletions of network service after initial implementation and acceptance (including all final service terminations):

A.	<u>Service Addition</u>	
	<u>Fiber Count</u>	<u>Charge/Fiber</u>
	1. 0 – 6	\$ 400
	2. 7 – 12	\$ 250
B.	3. 13 – Up	\$ 150
	<u>Service Deletion</u>	
	<u>Fiber Count</u>	<u>Charge/Fiber</u>
	1. 0 – 6	\$ 200
	2. 7 – 12	\$ 125
	3. 13 – Up	\$ 75

IV. Other

For services such as adding a new ring, adding or changing a concentrator location, rearranging multiple service connections, and rearranging a ring(s), the CUSTOMER shall submit a request and service description to the LADWP. The LADWP shall return to the CUSTOMER a cost estimate for the necessary work and materials within Thirty (30) days of receipt of the service request. The LADWP's charge to the CUSTOMER shall be based on time and materials and overhead involved plus a Fifteen (15) percent surcharge.

IRU-04 EXHIBIT D
CABLE SYSTEM SPECIFICATIONS

I. General

The LADWP shall install and maintain the CUSTOMER SYSTEM within the LADWP's CABLE SYSTEM in accordance with the criteria and specifications that follows:

II. Design Criteria

The LADWP will endeavor to keep the number of splices in a span to a minimum.

III. Optical Fiber Specifications

The LADWP will meet the optical specifications as detailed below for all new cable installed:

A. Single Node Fiber

<u>Parameter</u>	<u>Specifications</u>	<u>Units</u>
Maximum Attenuation, 1310 nm	0.50	dB/Km
Maximum Attenuation, 1550 nm	0.40	dB/Km
Cladding Diameter	125 ± 3	µm
Cutoff Wavelength	1250 ± 100	nm
Zero Dispersion Wavelength	1310 ± 12	nm
Maximum Dispersion, (1285-1330 nm)	3.5	ps/(nm-Km)

B. Multimode Fiber

<u>Parameter</u>	<u>Specifications</u>	<u>Units</u>
Maximum Attenuation, 850 nm	3.75	dB/Km
Maximum Attenuation, 1300 nm	1.50	dB/Km
Cladding Diameter	125 ± 3	µm
Core Diameter	62.5	µm
Minimum Modal Bandwidth (850 nm)	160	MHz-km
(1310 nm)	500	MHz-km

IV. Splice Loss

Splice loss on LADWP cables will average less than or equal to 0.15 dB for all splices the LADWP makes under this IRU-04 Agreement. The 0.15 dB splice average will only apply to splices between cables of identical physical and optical properties (i.e., core and cladding dimensions refractive index and optical loss characteristics). All splices shall be measured using bi-directional methods and averages.

V. End-to-End Attenuation Test Criteria

The CUSTOMER SYSTEM will be tested at both wavelengths specified for the installed cable type as specified below unless otherwise stated in this IRU-04 Agreement:

Single-mode fiber - 1310 nm. and 1550 nm

Multimode fiber - 850 nm and 1300 nm

The End-to-End Attenuation Test criteria will be based on the following formula:

Maximum acceptable end-to-end attenuation =

$$(A \times Lx) + (0.15 \times Nsp) + C$$

Where:

A = Max. attenuation at each wavelength as specified in Section III above.

Lx = Installed length of cable in kilometers (km)

Nsp = Number of fiber splices in the CABLE SYSTEM

C = Connector/pigtail loss. The attenuation contribution of each pigtail with associated connector is considered to be 1.0 dB comprised of 0.85 dB connector loss and 0.15 dB splice loss (pigtail to OSP cable splice).

Therefore, C = 1.0 dB if the span is connectorized on one end and
2.0 dB if connectorized on both ends

The parameters above are guaranteed unless otherwise specified.

In the event that the fiber measured attenuation values change after the cable is installed and is degraded by 2.0 dB or greater than specified above, the LADWP will perform corrective maintenance pursuant to Exhibit E of this IRU-04 Agreement to attempt to restore the fiber to its original specified attenuation values.

VI. Analog Video

The LADWP will not warrant CUSTOMER analog video transmission within the foregoing system parameters.

IRU-04 EXHIBIT E
MAINTENANCE AND REPAIR

Charges for Time and Material Service

The LADWP shall perform maintenance service at the rates established below, which rates are subject to change. Unless specifically authorized by the CUSTOMER, no Scheduled Maintenance will be performed outside of normal working hours, detailed below:

<u>Normal Working Hours</u> 7:00 a.m. to 3:30 p.m., Monday through Friday (Except LADWP-observed holiday)	<u>Hourly Rate</u> \$ 85.00
<u>Overtime Hours</u> 6:00 a.m. to 7:00 a.m., and 3:30 p.m. to 12:00 midnight, Monday through Friday (Except LADWP-observed holiday)	\$ 105.00
<u>Holiday Hours and Special Call Out:</u> Any time during an LADWP-observed holiday or any time during a Saturday or Sunday, or any time between the hours of 12:00 midnight and 6:00 a.m., Monday through Friday	\$ 130.00

Charges will be made for travel time to the location where maintenance is to be performed. If maintenance carries over after 3:30 p.m. or any maintenance during holiday hours of special call out, charges will also be made for travel time from the said location. Charges will be for a minimum of Two (2) hours for normal and overtime hours and for a minimum of Four (4) hours for holiday hours and special call out.

LADWP Holiday Schedule:

New Year's Day	Labor Day
Martin Luther King, Jr. Day	Columbus Day (Observed)
Presidents' Day	Veterans Day (Observed)
Memorial Day (Observed)	Thanksgiving Day and Day After
Independence Day	Christmas Day

All rates, charges, and holiday schedule are subject to change.

IRU-04 EXHIBIT F
ACCEPTANCE TESTING PLAN
FIBER ACCEPTANCE TESTING PROCEDURES

The LADWP will conduct the following tests as part of its Acceptance Testing Plan:

1. Non-destructive Attenuation Test (End-to-End)
2. Optical Time Domain Reflectometer Tests (OTDR)

Fiber acceptance testing will be performed to ensure that the Customer Fiber Segments will operate within the parameters of the Specifications set forth in IRU-04 Exhibit D – Cable System Specifications.

More specifically, fiber acceptance testing will include the following:

1. Continuity/Uniformity Tests

All fibers shall be tested bi-directionally at 1310 nm or 1550 nm, as applicable, with an OTDR; the subsequent traces shall be inspected for End-to-End continuity and for uniform attenuation. These traces will be stored on diskette and will be compatible with Laser Precision PC-OTDR software.

2. Optical Length

The OTDR will be used to determine the end-to-end optical length of the cable where possible.

3. Splice Loss

Splice loss will be measured bi-directionally with an OPTDR using the Splice Loss Average method. The average acceptance splice loss shall be the measurement for splice loss set forth below.

4. End-to-End Loss

Using a light source and a power meter, the bi-directional, connector-to-connector attenuation will be measured for each fiber at 1310 nm and 1550 nm, as applicable. The acceptance average attenuation per kilometer shall be the attenuation set forth in IRU-04 Exhibit D – Cable System Specifications.

IRU-04 EXHIBIT F

LOS ANGELES DEPARTMENT OF WATER & POWER
FIBER OPTIC ENTERPRISE
ACCEPTANCE FORM

Agreement No.: _____
Demarcation Point 1: _____
Demarcation Point 2: _____
Company Name: _____
Address: _____

Customer Contact: _____
Phone: _____
Number of fibers: _____
Distance: _____
Attenuation Test
Results: Within contract specifications
OTDR Traces
Attached: OTDR traces
LADWP Contact: _____
Phone: _____

Special Notes: _____

System installation is complete and the
fibers are ready for normal service under
the care of LADWP maintenance
organization

System is accepted for normal service
under care of customer operations and
maintenance organization

Name _____
Approved _____
Customer Representative
Date 4/3/2014

Name _____
Approved _____
Customer Manager
Date 4/3/2014

Name _____
Approved _____
LADWP Representative
Date _____

Name _____
Approved _____
LADWP Manager
Date _____

IRU-04 EXHIBIT G

LOS ANGELES DEPARTMENT OF WATER & POWER
TROUBLE REPORTING PROCEDURE

The LADWP maintains its fiber optic network (CABLE SYSTEM) in accordance with industry standards. Should trouble with the service arise, please call the following number:

LADWP Telecommunications Trouble Number:
(213) 367-2225 (367-CABL) (24 hours)

This is the number of the LADWP's Voice Operations Center (VOC). The VOC will escalate continuing troubles to LADWP's management.

Upon clearance of the trouble, the VOC will notify the trouble-reporting location of clearance and reason for the trouble.

The LADWP shall be on site and begin investigating and correcting the reported condition within Four (4) hours of notification and will provide the Customer with progress reports at Four (4) hour intervals.

AGREEMENT NO. FO-746-02/2014
NBC UNIVERSAL, INC.
SHORT FORM IRU-05 LEASE AGREEMENT

This SHORT FORM IRU-05 LEASE AGREEMENT (hereinafter referred to as the "IRU-05 Agreement") is dated May 5, 2014, between the CITY OF LOS ANGELES, a California municipal corporation, acting by and through the DEPARTMENT OF WATER AND POWER (hereinafter referred to as the "LADWP" or "CITY OF LOS ANGELES") having its principal office at 111 North Hope Street, Los Angeles, California 90012, and NBC Universal, Inc. (hereinafter referred to as "CUSTOMER"), with its principal office at 100 Universal City Plaza, Universal City, California 91608-1002, and upon execution shall be a part of the CUSTOMER Optical Fiber Lease Agreement No. FO-741-02/2014 (Master Agreement) dated May 5, 2014.

WHEREAS, LADWP provides optical fiber strands and facilities in its Cable System (hereinafter referred to as "CABLE SYSTEM") for telephone, telecommunications, data, cable television or other video services, and CUSTOMER desires to use such CABLE SYSTEM components for its business in providing telephone, telecommunications, data, internet, cable television or other video services. The LADWP optical fiber strands and facilities used by CUSTOMER are identified in the Master Agreement as Customer Systems and likewise shall be referred to as "CUSTOMER SYSTEM" in this IRU-05 Agreement.

THEREFORE in consideration of the mutual agreements herein, the Parties mutually agree as follows:

1. The LADWP hereby grants to CUSTOMER an Indefeasible Right of Use (IRU) of the following LADWP CABLE SYSTEM components:
 - A. Optical fiber strands and Building/Premise Entry to buildings that are listed in the attached IRU-05 Exhibit A – Approved Optical Fiber Circuits and Building/Premise Optical Fiber Entries.

These individual LADWP CABLE SYSTEM components collectively shall be the CUSTOMER SYSTEM for this IRU-05 Agreement. The CUSTOMER SYSTEM shall be inclusive of the LADWP's fiber optic CABLE SYSTEM between and including the LADWP's sides of the originating and terminating demarcation points.

2. The LADWP will construct, install, and/or provide the CUSTOMER SYSTEM for CUSTOMER's use in accordance with the terms of the Master Agreement and this IRU-05 Agreement. The LADWP shall use reasonable efforts to comply with the project schedule that is mutually agreed by both Parties.
3. CUSTOMER's IRU in the CUSTOMER SYSTEM shall commence on May 5, 2014 and shall be valid for an initial term of Five (5) years. Thereafter this IRU-05 Agreement shall automatically renew each year up to the expiration date of the Master Agreement unless a notice to cancel is provided by the CUSTOMER Thirty (30) calendar days prior to expiration date of the initial term or renewal terms of this IRU-05 Agreement, provided that, the term of this IRU-05 Agreement shall not exceed the term of the Master Agreement, as may be amended from time to time. Subject to the terms and conditions of the Master Agreement, this IRU-05 Agreement shall continue until the term expires or until terminated as provided in Section 14.0 of the Master Agreement.
4. The LADWP shall provide the following items for the CUSTOMER SYSTEM Service:

- 4.1 Not Applicable.
5. CUSTOMER shall provide the following items for the CUSTOMER SYSTEM Service:
- 5.1 Not Applicable.
6. The payments and charges shall be in accordance with Section 7.0 of the Master Agreement and as specifically identified in the following subparagraphs:
- 6.1 Invoiced Charges
- 6.1.1 Invoiced charges are as stipulated in IRU-05 Exhibit B – Summary IRU/Agreement Invoice.
- 6.1.2 As included in IRU-05 Exhibit C – Fiber System One-Time Connect/Disconnect/Rearrange Charges, CUSTOMER shall pay one-time building or external network service connection and disconnection charges for each building service added or deleted after the initial establishment and acceptance of a CUSTOMER SYSTEM cable segment. One-time CUSTOMER service charges also apply if the CUSTOMER requires installation of a new distribution ring or concentrator in an already established CABLE SYSTEM or CUSTOMER SYSTEM distribution cable segment, rearrangement of existing service connections, and rearrangement of a ring or concentrator operation. The charges and application rules are identified in IRU-05 Exhibit C.
- 6.2 Billing and Notices
- 6.2.1 The LADWP shall send all notices and invoices to CUSTOMER at the following address:
- NBC Universal, Inc.
Attention: Mike Robledo
100 Universal City Plaza
Room 1360-04F32
Universal City, California 91608
Telephone: (818) 777-4205
Mobile: (818) 309-3612
Facsimile: (818) 866-1533
Email: Mike.Robledo@nbcuni.com
- 6.2.2 The LADWP acknowledges and agrees that any invoice sent to any other CUSTOMER address, without the prior written consent or direction of CUSTOMER, will not be deemed received by CUSTOMER until such misdirected invoice is actually received by CUSTOMER at the above address.
7. All maintenance and repair functions on the CUSTOMER SYSTEM and all facilities through which the CUSTOMER SYSTEM passes, including, but not limited to, conduit, innerduct, poles and equipment, shall be performed by the LADWP. CUSTOMER is prohibited from performing any work whatsoever on the CUSTOMER SYSTEM.
- 7.1 Section 4.0 of the Master Agreement applies.

- 7.2 The LADWP shall maintain the CUSTOMER SYSTEM pursuant to the specifications provided in IRU-05 Exhibit D – Cable System Specifications.
- 7.3 The LADWP shall provide to CUSTOMER a Twenty-Four (24) hour a day, trouble-reporting telephone number as shown in IRU-05 Exhibit G – Trouble Reporting Procedure. CUSTOMER shall provide to LADWP a Twenty-Four (24) hour a day trouble coordination telephone number.
- 7.4 Any impairment or outage reasonably suspected to be caused by CUSTOMER SYSTEM components on the LADWP's side of the demarcation point shall require a response from the LADWP. During CUSTOMER SYSTEM impairments or outages affecting CUSTOMER's service, LADWP shall keep CUSTOMER advised and updated. The LADWP's personnel shall respond within Four (4) hours from notification by CUSTOMER of an impairment or outage materially affecting service.
- 7.5 CUSTOMER shall be charged with any false maintenance call outs at the standard LADWP rate in effect at the time services are performed. The LADWP's rates in effect at the time of execution of this IRU-05 Agreement are set forth in IRU-05 Exhibit E – Maintenance and Repair and are subject to change.
8. The LADWP will grant a credit allowance for service interruption calculated and credited in One (1) hour increments. A service interruption will be deemed to have occurred only if:
- 8.1 Service becomes unusable to CUSTOMER as a result of failure of LADWP equipment, facilities, or personnel used to provide the service; and
- 8.2 The interruption is not the result of:
- 8.2.1 The negligence or acts of CUSTOMER or its agents, employees, suppliers, or contractors;
- 8.2.2 The failure or malfunction of non-LADWP equipment, facilities, or system;
- 8.2.3 Any circumstances or causes beyond the control of the LADWP; or
- 8.2.4 A service interruption caused by scheduled maintenance, alteration, or completion of such maintenance or alteration beyond normal time requirements.
- 8.3 Such credits will accumulate during a calendar year and be credited against the CUSTOMER invoiced service charge (IRU-05 Exhibit B) for the next year and will apply only to those segments experiencing the service interruption, except for the final year of the term of this IRU-05 Agreement, in which LADWP will directly reimburse CUSTOMER for any service interruption credits.
9. This IRU-05 Agreement, including Exhibits A, B, C, D, E, F, and G, which are attached, are hereby incorporated into the Master Agreement, and all of which constitutes the entire agreement between the Parties with respect to the subject matter. This IRU-05 Agreement cannot be modified except in writing signed by both Parties.

10. Governing Law: This IRU-05 Agreement was made and entered into in the City of Los Angeles and shall be governed by, interpreted and enforced in accordance with the laws of the State of California and the City of Los Angeles, without regard to conflict of law principles.
11. Venue: All litigation arising out of, or relating to this IRU-05 Agreement, shall be brought in a State or Federal court in the County of Los Angeles in the State of California. The Parties irrevocably agree to submit to the exclusive jurisdiction of such courts in the State of California and waive any defense of forum non conveniens.
12. Price Adjustment: This IRU-05 Agreement and any extensions thereto shall be subject to a market rate adjustment after the initial term of this IRU-05 Agreement and thereafter at such time of each extension. The LADWP shall have sole discretion on the chosen valuation methodology for calculating and implementing this market rate adjustment. Extension shall include the yearly renewal of this IRU-05 Agreement, both automatic renewal or the exercise of an option to renew.
13. Each Party was represented by legal counsel during the negotiation and execution of this IRU-05 Agreement and each Party will be responsible for its own attorney fees and costs in any relevant litigation.

IN WITNESS WHEREOF, the Parties hereto have caused this Short Form IRU-05 Lease Agreement No. FO-746-02/2014 to be executed by their authorized representatives on the day and year written above.

DEPARTMENT OF WATER AND POWER
OF THE CITY OF LOS ANGELES BY
BOARD OF WATER AND POWER COMMISSIONERS
OF THE CITY OF LOS ANGELES

APPROVED AS TO FORM AND LEGALITY
MICHAEL N. FEUER, CITY ATTORNEY

APR 14 2014
BY *Syndi Driscoll*
SYNDI DRISCOLL
DEPUTY CITY ATTORNEY

By: _____
MARCIE L. EDWARDS
General Manager

Date: _____

And: _____
BARBARA E. MOSCHOS
Secretary

NBC UNIVERSAL, INC.

By: *[Signature]*
Title: Director, Data Centers
Date: 4/3/2014

IRU-05 EXHIBIT A
APPROVED OPTICAL FIBER CIRCUITS AND
BUILDING/PREMISE OPTICAL FIBER ENTRIES

A.1 Circuit connections and building entry:

CONNECTION	NUMBER OF STRANDS	CIRCUIT ID
Location A: Building 2220 100 Universal City Plaza Universal City, California Location B: LADWP's Receiving Station E (RS-E) (handoff to the City of Burbank) 5740 Whitnall Highway North Hollywood, California	6	LL00959

IRU-05 EXHIBIT B
SUMMARY IRU-05/AGREEMENT INVOICE

This Summary IRU-05/Agreement Invoice provides a summary of all transactions of the Short Form IRU-05 Lease Agreement No. FO-746-02/2014.

A.1 Fiber Charges:

Item	Description	IRU-05 Fees
1.0	Annual Recurring Fiber:	
1.1	Six (6) single mode optical fibers originating at a demarcation splice or breakout point located at the Building 2220, 100 Universal City Plaza, Universal City, and terminating at a demarcation splice or breakout point at the LADWP's RS-E 5740 Whitnall Highway, North Hollywood.	\$36,720.00
2.0	Annual Recurring Building Entries:	
2.1	Building/Premise Entry at Building 2220, 100 Universal City Plaza Universal City, California for six (6) fibers	\$7,200.00
2.2	Building/Premise Entry at LADWP's RS-E 5740 Whitnall Highway North Hollywood, California for six (6) fibers	\$7,200.00
	Subtotal:	\$51,120.00
	6% Volume Discount:	(\$3,067.20)
	5% Loyalty Discount:	(\$2,556.00)
	5% Term Discount:	(\$2,556.00)
	Total Annual Recurring Charge:	\$42,940.80
3.0	Non-Recurring Charge:	Not Applicable

A.2 Invoicing and Payments:

CUSTOMER's initial bill shall include the Annual Recurring Charge, prorated through the end of the calendar year, and the Non-Recurring Charge, as summarized herein. Payment of such charges shall be due in full within Forty-five (45) days of date of invoice.

The Annual Recurring Fee shall be payable in advance by the 15th day of January of each year of the Term of this IRU-05 Agreement; provided, however, that no such Recurring Fee shall be due for a segment that has not yet successfully completed the Acceptance Testing procedures set forth in IRU-05 Exhibit F – Acceptance Testing Plan.

The last Recurring Fee shall be prorated through the Term expiration date and shall be payable in advance by the 15th day of January of the expiry year.

NOTE: Transactions invoiced reflects the services purchased from the LADWP by the CUSTOMER and shall be the amount due the LADWP upon CUSTOMER acceptance. This invoice reflects no federal, state or local taxes. Taxes, as appropriate, shall be added or invoiced separately.

IRU-05 EXHIBIT C
FIBER SYSTEM
ONE-TIME CONNECT/DISCONNECT/REARRANGE CHARGES

I. General

This one-time service connection charges shall apply for the initial establishment and cutover of a CUSTOMER's point-to-point CABLE SYSTEM or distribution CABLE SYSTEM (ring or segment). The CUSTOMER shall pay for all services added or deleted, or rearranged subsequent to the cutover date and shall pay for all connection services.

II. Building Service

The following one-time charges apply for the addition or deletion of building service to/from a CUSTOMER's point-to-point or distribution CABLE SYSTEM and for all building service connections. These are based on the number of building entry fibers involved in the service. Connection is required both in-building and in-street:

A. <u>Service Addition</u>		
	<u>Fiber Count</u>	<u>Charge/Fiber</u>
1.	0 – 6	\$ 400
2.	7 – 12	\$ 250
3.	13 – Up	\$ 150
B. <u>Service Deletion</u>		
	<u>Fiber Count</u>	<u>Charge/Fiber</u>
1.	0 – 6	\$ 200
2.	7 – 12	\$ 125
3.	13 – Up	\$ 75

III. Network Service

The CUSTOMER may choose to establish a network connection to the LADWP's CABLE SYSTEM at a demarcation point in a LADWP maintenance hole or other off-premises location rather than within a building or on building grounds. Such network connection may involve either a distribution system or a point-to-point system. The following one-time charges apply to all network service connections and to all additions

or deletions of network service after initial implementation and acceptance (including all final service terminations):

A.	<u>Service Addition</u>	
	<u>Fiber Count</u>	<u>Charge/Fiber</u>
	1. 0 – 6	\$ 400
	2. 7 – 12	\$ 250
B.	3. 13 – Up	\$ 150
	<u>Service Deletion</u>	
	<u>Fiber Count</u>	<u>Charge/Fiber</u>
	1. 0 – 6	\$ 200
	2. 7 – 12	\$ 125
	3. 13 – Up	\$ 75

IV. Other

For services such as adding a new ring, adding or changing a concentrator location, rearranging multiple service connections, and rearranging a ring(s), the CUSTOMER shall submit a request and service description to the LADWP. The LADWP shall return to the CUSTOMER a cost estimate for the necessary work and materials within Thirty (30) days of receipt of the service request. The LADWP's charge to the CUSTOMER shall be based on time and materials and overhead involved plus a Fifteen (15) percent surcharge.

IRU-05 EXHIBIT D
CABLE SYSTEM SPECIFICATIONS

I. General

The LADWP shall install and maintain the CUSTOMER SYSTEM within the LADWP's CABLE SYSTEM in accordance with the criteria and specifications that follows:

II. Design Criteria

The LADWP will endeavor to keep the number of splices in a span to a minimum.

III. Optical Fiber Specifications

The LADWP will meet the optical specifications as detailed below for all new cable installed:

A. Single Node Fiber

<u>Parameter</u>	<u>Specifications</u>	<u>Units</u>
Maximum Attenuation, 1310 nm	0.50	dB/Km
Maximum Attenuation, 1550 nm	0.40	dB/Km
Cladding Diameter	125 ± 3	μm
Cutoff Wavelength	1250 ± 100	nm
Zero Dispersion Wavelength	1310 ± 12	nm
Maximum Dispersion, (1285-1330 nm)	3.5	ps/(nm-Km)

B. Multimode Fiber

<u>Parameter</u>	<u>Specifications</u>	<u>Units</u>
Maximum Attenuation, 850 nm	3.75	dB/Km
Maximum Attenuation, 1300 nm	1.50	dB/Km
Cladding Diameter	125 ± 3	μm
Core Diameter	62.5	μm
Minimum Modal Bandwidth (850 nm)	160	MHz-km
(1310 nm)	500	MHz-km

IV. Splice Loss

Splice loss on LADWP cables will average less than or equal to 0.15 dB for all splices the LADWP makes under this IRU-05 Agreement. The 0.15 dB splice average will only apply to splices between cables of identical physical and optical properties (i.e., core and cladding dimensions refractive index and optical loss characteristics). All splices shall be measured using bi-directional methods and averages.

V. End-to-End Attenuation Test Criteria

The CUSTOMER SYSTEM will be tested at both wavelengths specified for the installed cable type as specified below unless otherwise stated in this IRU-05 Agreement:

Single-mode fiber - 1310 nm. and 1550 nm

Multimode fiber - 850 nm and 1300 nm

The End-to-End Attenuation Test criteria will be based on the following formula:

Maximum acceptable end-to-end attenuation =

$$(A \times Lx) + (0.15 \times Nsp) + C$$

Where:

A = Max. attenuation at each wavelength as specified in Section III above.

Lx = Installed length of cable in kilometers (km)

Nsp = Number of fiber splices in the CABLE SYSTEM

C = Connector/pigtail loss. The attenuation contribution of each pigtail with associated connector is considered to be 1.0 dB comprised of 0.85 dB connector loss and 0.15 dB splice loss (pigtail to OSP cable splice).

Therefore, C = 1.0 dB if the span is connectorized on one end and
2.0 dB if connectorized on both ends

The parameters above are guaranteed unless otherwise specified.

In the event that the fiber measured attenuation values change after the cable is installed and is degraded by 2.0 dB or greater than specified above, the LADWP will perform corrective maintenance pursuant to Exhibit E of this IRU-05 Agreement to attempt to restore the fiber to its original specified attenuation values.

VI. Analog Video

The LADWP will not warrant CUSTOMER analog video transmission within the foregoing system parameters.

IRU-05 EXHIBIT E
MAINTENANCE AND REPAIR

Charges for Time and Material Service

The LADWP shall perform maintenance service at the rates established below, which rates are subject to change. Unless specifically authorized by the CUSTOMER, no Scheduled Maintenance will be performed outside of normal working hours, detailed below:

<u>Normal Working Hours</u> 7:00 a.m. to 3:30 p.m., Monday through Friday (Except LADWP-observed holiday)	<u>Hourly Rate</u> \$ 85.00
<u>Overtime Hours</u> 6:00 a.m. to 7:00 a.m., and 3:30 p.m. to 12:00 midnight, Monday through Friday (Except LADWP-observed holiday)	\$ 105.00
<u>Holiday Hours and Special Call Out:</u> Any time during an LADWP-observed holiday or any time during a Saturday or Sunday, or any time between the hours of 12:00 midnight and 6:00 a.m., Monday through Friday	\$ 130.00

Charges will be made for travel time to the location where maintenance is to be performed. If maintenance carries over after 3:30 p.m. or any maintenance during holiday hours of special call out, charges will also be made for travel time from the said location. Charges will be for a minimum of Two (2) hours for normal and overtime hours and for a minimum of Four (4) hours for holiday hours and special call out.

LADWP Holiday Schedule:

New Year's Day	Labor Day
Martin Luther King, Jr. Day	Columbus Day (Observed)
Presidents' Day	Veterans Day (Observed)
Memorial Day (Observed)	Thanksgiving Day and Day After
Independence Day	Christmas Day

All rates, charges, and holiday schedule are subject to change.

IRU-05 EXHIBIT F
ACCEPTANCE TESTING PLAN
FIBER ACCEPTANCE TESTING PROCEDURES

The LADWP will conduct the following tests as part of its Acceptance Testing Plan:

1. Non-destructive Attenuation Test (End-to-End)
2. Optical Time Domain Reflectometer Tests (OTDR)

Fiber acceptance testing will be performed to ensure that the Customer Fiber Segments will operate within the parameters of the Specifications set forth in IRU-05 Exhibit D – Cable System Specifications.

More specifically, fiber acceptance testing will include the following:

1. Continuity/Uniformity Tests

All fibers shall be tested bi-directionally at 1310 nm or 1550 nm, as applicable, with an OTDR; the subsequent traces shall be inspected for End-to-End continuity and for uniform attenuation. These traces will be stored on diskette and will be compatible with Laser Precision PC-OTDR software.

2. Optical Length

The OTDR will be used to determine the end-to-end optical length of the cable where possible.

3. Splice Loss

Splice loss will be measured bi-directionally with an OPTDR using the Splice Loss Average method. The average acceptance splice loss shall be the measurement for splice loss set forth below.

4. End-to-End Loss

Using a light source and a power meter, the bi-directional, connector-to-connector attenuation will be measured for each fiber at 1310 nm and 1550 nm, as applicable. The acceptance average attenuation per kilometer shall be the attenuation set forth in IRU-05 Exhibit D – Cable System Specifications.

IRU-05 EXHIBIT F

LOS ANGELES DEPARTMENT OF WATER & POWER
FIBER OPTIC ENTERPRISE
ACCEPTANCE FORM

Agreement No.: _____
Demarcation Point 1: _____
Demarcation Point 2: _____
Company Name: _____
Address: _____

Customer Contact: _____
Phone: _____
Number of fibers: _____
Distance: _____
Attenuation Test
Results: Within contract specifications
OTDR Traces
Attached: OTDR traces
LADWP Contact: _____
Phone: _____

Special Notes: _____

System installation is complete and the
fibers are ready for normal service under
the care of LADWP maintenance
organization

System is accepted for normal service
under care of customer operations and
maintenance organization

Name _____
Approved _____

Customer Representative
Date 4/3/2014

Name _____
Approved _____

LADWP Representative
Date _____

Name _____
Approved _____

Customer Manager
Date 4/3/2014

Name _____
Approved _____

LADWP Manager
Date _____

IRU-05 EXHIBIT G

LOS ANGELES DEPARTMENT OF WATER & POWER
TROUBLE REPORTING PROCEDURE

The LADWP maintains its fiber optic network (CABLE SYSTEM) in accordance with industry standards. Should trouble with the service arise, please call the following number:

LADWP Telecommunications Trouble Number:
(213) 367-2225 (367-CABL) (24 hours)

This is the number of the LADWP's Voice Operations Center (VOC). The VOC will escalate continuing troubles to LADWP's management.

Upon clearance of the trouble, the VOC will notify the trouble-reporting location of clearance and reason for the trouble.

The LADWP shall be on site and begin investigating and correcting the reported condition within Four (4) hours of notification and will provide the Customer with progress reports at Four (4) hour intervals.