

AGREEMENT NO. FO-783-06/2015
THE REGENTS OF THE UNIVERSITY OF CALIFORNIA
SHORT FORM IRU-01 LEASE AGREEMENT

This SHORT FORM IRU-01 LEASE AGREEMENT (hereinafter referred to as the "IRU-01 Agreement") is dated for convenience as of _____, 2015, 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 The Regents of the University of California, a California public corporation, on behalf of UCLA Information Technology Services (hereinafter referred to as "CUSTOMER"), with its principal office at 741 Charles E. Young Drive, 2nd Floor CSBI, Los Angeles, California 90095-1363, and upon execution shall be a part of the CUSTOMER Optical Fiber Lease Agreement No. FO-782-06/2015 (Master Agreement) dated _____, 2015.

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 October 18, 2015 and shall be valid for an initial term of Five (5) years. Thereafter, CUSTOMER shall have an option to effect One (1) renewal term of Five (5) years, 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. If CUSTOMER elects to renew for an additional Five (5) year term, CUSTOMER shall exercise the renewal terms of this IRU-01 Agreement with written notice of intent to exercise renewal to

LADWP at least Thirty (30) calendar days prior to the expiration date of the initial term or the renewed term.

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-01/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:

UCLA - Information Technology Services
741 Charles E. Young Drive, 2nd Floor CSBI
Box 951363
Los Angeles, California 90095-1363
Attention: Alice Ovanesian
Manager, Project Support Services
Telephone No.: (310) 206-4005
E-mail Address: ALICE@IT.UCLA.EDU

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 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 the IRU-01, 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-783-06/2015 to be executed by their authorized representatives on the day and year written below.

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

By: _____
MARCIE L. EDWARDS
General Manager

Date: _____

And: _____
BARBARA E. MOSCHOS
Secretary

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA
ON BEHALF OF
UCLA INFORMATION TECHNOLOGY SERVICES

By: _____
William D. Bryant

Title: _____
Chief Procurement Officer

Date: _____
11/19/15

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

DEC 02 2015
BY *[Signature]*
RYNCH DRISCOLL
DEPUTY CITY ATTORNEY

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

A.1.1 Circuit connections and building entry:

CONNECTION	NUMBER OF STRANDS	CIRCUIT ID
Location A: LADWP IS-1591 10960 Wilshire Boulevard Los Angeles, California Location B: LADWP IS-0176 10920 Wilshire Boulevard Los Angeles, California	4	LL00366

A.1.2 Circuit connections and building entry:

CONNECTION	NUMBER OF STRANDS	CIRCUIT ID
Location A: LADWP IS-1504 10880 Wilshire Boulevard Los Angeles, California Location B: LADWP IS-0176 10920 Wilshire Boulevard Los Angeles, California	2	LL00670

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-783-06/2015.

A.1.1 Fiber Charges:

Item	Description	IRU-01 Fees
1.0	Annual Recurring Fiber:	
1.1	Four (4) single mode optical fibers originating at LADWP IS-1591, 10960 Wilshire Boulevard and terminating at LADWP IS-0176, 10920 Wilshire Boulevard, Los Angeles, California (Circuit No. LL00366)	\$14,400.00
2.0	Annual Recurring Building Entries:	
2.1	Building/Premise Entry at LADWP IS-1591 10960 Wilshire Boulevard, Los Angeles, California for Four (4) fibers	\$4,800.00
2.2	Building/Premise Entry at LADWP IS-0176 10920 Wilshire Boulevard, Los Angeles, California for Four (4) fibers	\$4,800.00
	Annual Recurring Charge:	\$24,000.00
	10% Educational Discount:	(\$2,400.00)
	4% Volume Discount:	(\$960.00)
	5% Loyalty Discount:	(\$1,200.00)
	5% Term Discount:	(\$1,200.00)
	Total Annual Recurring Charge:	\$18,240.00
3.0	Non-Recurring Charge:	Not Applicable

A.1.2 Fiber Charges:

Item	Description	IRU-01 Fees
1.0	Annual Recurring Fiber:	
1.1	Two (2) single mode optical fibers originating at LADWP IS-1504, 10880 Wilshire Boulevard and terminating at LADWP IS-0176, 10920 Wilshire Boulevard, Los Angeles, California. (Circuit No. LL00670)	\$7,200.00
2.0	Annual Recurring Building Entries:	
2.1	Building/Premise Entry at LADWP IS-1504 10880 Wilshire Boulevard, Los Angeles, California for Two (2) fibers	\$2,400.00
2.2	Building/Premise Entry at LADWP IS-0176 10920 Wilshire Boulevard, Los Angeles, California for Two (2) fibers	\$2,400.00
	Annual Recurring Charge:	\$12,000.00
	10% Educational Discount:	(\$1,200.00)
	4% Volume Discount:	(\$480.00)
	5% Loyalty Discount:	(\$600.00)
	5% Term Discount:	(\$600.00)
	Total Annual Recurring Charge:	\$9,120.00
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 fiscal 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 July 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 July 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

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

Name _____
Approved _____
Customer Representative
Date _____

Name _____
Approved _____
Customer Manager
Date _____

Name _____
Approved _____
LADWP Representative
Date _____

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.