INDUSTRY PUBLIC UTILITIES ELECTRICAL UTILITY WILDFIRE MITIGATION PLAN

VERSION 2

July 8, 2021

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I. OVERVIEW

A. POLICY STATEMENT

City of Industry ("COI" or "City") is a California charter city, located in Los Angeles County, approximately 12 square miles in area. It is mostly an industrial city and according to 2010 Census, it is home for over 3,000 businesses and approximately 219 residents. The electrical service to most of the customers in the City is provided by Southern California Edison ("SCE"). On February 22, 2001, the City Council adopted Ordinance No. 664 (Codified as Title 7 of the Industry Municipal Code), establishing a public utilities department to oversee the operations of the public utility (the utility is hereinafter referred to as the "Industry Public Utilities" or the "IPU". The IPU currently provides electrical service to approximately 115 customers with peak demand of 8 MW, and annual energy sales of approximately 42,000 MWh. IPU's overarching goal is to provide safe, reliable, and economic electric service to the local community. To meet this goal, the IPU constructs, maintains, and operates its electrical lines and equipment in a manner that minimizes the risk of catastrophic wildfire posed by its electrical lines and equipment. All IPU electrical lines are underground

B. PURPOSE OF THE WILDFIRE MITIGATION PLAN

The IPU is in a region of the state with a low wildfire risk. No part of the IPU's service territory is in or near the High Fire Threat District designated in the California Public Utilities Commission's ("CPUC") Fire Threat Map, and all IPU service territory is designated as "non-fuel" or "moderate" in the California Department of Forestry and Fire Protection's ("CALFIRE") Fire and Resource Assessment Program ("FRAP") Fire Threat Map. Based on a review of local conditions and historical fires, IPU has determined that its electrical lines and equipment do not pose a significant risk of catastrophic wildfire.

Moreover, the IPU's entire 12,000- volt electric distribution system is located underground in conduit and vaults and has no overhead distribution lines. IPU does not own, operate, or maintain any transmission or sub- transmission lines except two short underground 66,000- Volt taps less than 150 feet long which run from SCE's 66,000- Volt Grand Crossing Substation to the IPU owned Waddingham 66,000 –Volt to 12,000- Volt Substation. Two other IPU interconnections were made with SCE are located at the Pacific Palms Hotel and at the Anaheim- Puente Road City owned parcel to the west of the northerly end of the street via an underground 12,000- volt distribution system. All distribution lines emanating from Waddingham substation are underground and all future distribution lines will be underground.

Historically, undergrounded electric lines have not been associated with catastrophic wildfires. The undergrounding of electric lines serves as an effective mitigation measure to reduce the potential of power-line ignited wildfires. Based on a review of local conditions and historical fires, IPU has determined that its electrical lines and equipment do not pose a significant risk of catastrophic wildfire.

Despite this low risk, IPU takes appropriate actions to help the region prevent and respond to the increasing risk of devastating wildfires. In its role as a public agency, IPU closely coordinates with other local safety and emergency officials (Los Angeles County Fire and Sheriff Departments) to help protect against fires and respond to emergencies. In its role as a utility, IPU follows all applicable design, construction, operation, and maintenance requirements that reduce safety risks associated with its system. This Wildfire Mitigation Plan ("Plan") describes the safety-related measures that IPU follows to reduce its risk of causing wildfires, including its various programs, policies, and procedures.

This Plan is subject to direct supervision by the Industry Public Utilities Commission and is implemented by Public Utilities Director. This Plan complies with the requirements of Public Utilities Code Section 8387 for publicly owned electric utilities to prepare a wildfire mitigation plan by January 1, 2020, and annually thereafter. This plan also complies with the requirement of SB 901.

C. ORGANIZATION OF THE WILDFIRE MITIGATION PLAN

This Wildfire Mitigation Plan includes the following elements:

- Objectives of the Plan;
- Roles and responsibilities for carrying out the Plan;
- Identification of key wildfire risks and risk drivers;
- Description of wildfire prevention, mitigation, and response strategies and programs;
- Metrics for evaluating the performance of the Plan and identifying areas for improvement; and
- Review and validation of the Plan.

II. OBJECTIVES OF THE WILDFIRE MITIGATION PLAN

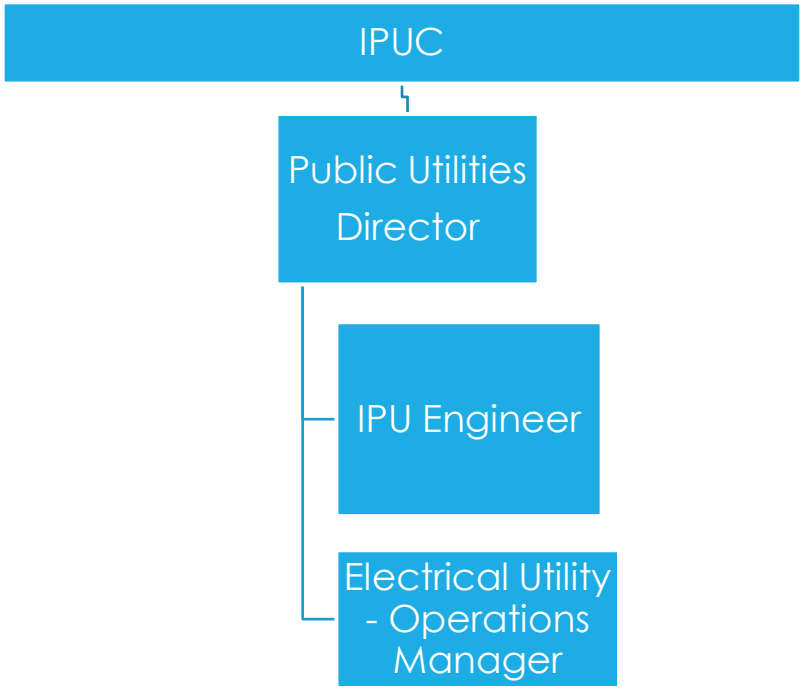
The primary goal of this Wildfire Mitigation Plan is to describe IPU's existing programs, practices, and measures that effectively reduce the probability that IPU's electric supply system could be the origin or contributing source for the ignition of a wildfire. To support this goal, IPU regularly evaluates the prudent and cost-effective improvements to its

physical assets, operations, and training that can help reduce the risk of equipment-related fires.

The secondary goal of this Wildfire Mitigation Plan is to improve the resiliency of the electric grid. As part of the development of this Plan, IPU assesses new industry practices and technologies that will reduce the likelihood of an interruption (frequency) in service and improve the restoration (duration) of service.

III. ROLES AND RESPONSIBILITIES

A. UTILITY GOVERNANCE STRUCTURE



This Plan is subject to the direct supervision by the Industry Public Utilities Commission and will be implemented by the Industry Public Utilities Director. Pursuant to Section 7.04.020 of the City of Industry Municipal Code, the City Council serves as the Commissioners of the IPUC. The City Manager serves as the Public Utilities Director, and the City's Director of Public Works/City Engineer serves as the Engineer to the IPU.

B ROLES AND RESPONSIBILITIES FOR EXECUTION OF PLAN

Executive Level Responsibility: The Public Utilities Director will oversee implementation of the Plan and ensure that staff follows procedures and protocols. IPU Engineer will manage the execution of performance monitoring which includes providing guidance to IPU staff and leading the development of any reports required.

The table below describes the proposed assignments and are subject to change.

Assignment	Lead Personnel	Key Technical Personnel
IPU Wildfire Prevention and Improved Response Program	IPU Engineer and person in- charge of Local Los Angeles County Fire Department Station	IPU- Electrical Operations Manager and Local LA County Fire Department
Public Safety and Notification	IPU Engineer & IPU-Electrical Operations Manager	IPU Contractor – ENCO City and IPU Staff as required
Enhanced Inspections and Operational Practices	IPU- Electrical Operations Manager	IPU Staff – Inspectors IPU Contractors – PUI &ENCO
Wildfire Response and Recovery	IPU Engineer and person in- charge of Local Los Angeles County Fire Department Station	IPU- Electrical Operations Manager and Local LA County Fire Department
Coordination with Los Angeles County Sheriffs and LA County Public Works Department	IPU Engineer and person in- charge of Local Los Angeles County Fire Department Station	CNC Engineering for LA County Public Works Department
Coordination with other City Departments	IPU Engineer	CNC Engineering

C. ROLE IN WILDFIRE PREVENTION

IPU – Electrical staff roles and responsibilities for (1) electric facility design, maintenance, and inspection; and (2) Vegetation Management if required.

- Operate system in a manner that will minimize potential wildfire risks.
- Take all reasonable and practicable actions to minimize the risk of a catastrophic wildfire caused by IPU electric facilities.
- Coordinate with federal, state, and local fire management personnel as necessary or appropriate to implement IPU Wildfire Mitigation Plan.
- Immediately report fires, pursuant to existing IPU practices and the requirements of this Wildfire Mitigation Plan.

- Take corrective action when the staff witnesses or is notified that fire protection measures have not been properly installed or maintained.
- Comply with relevant federal, state, and industry standard requirements, including the industry standards established by the CPUC.

D. WILDFIRE RESPONSE AND RECOVERY

Los Angeles County Fire Department ("LACFD") is the lead agency in cooperation with City and IPU for implementation of the Wildfire Prevention and Response Program. LACFD will direct IPU regarding public safety priorities. IPU Staff's role in response to wildfire and during recovery process is set forth in Section E ("SEMS"). As mentioned above under the roles and responsibilities, IPU will coordinate with LAC Sheriff's Department for situational awareness and other public safety issues. The IPU will also coordinate with Los Angeles County Department of Public Works ("LACDPW") and other local water and wastewater companies to ensure power to these critical facilities.

E. STANDARDIZED EMERGENCY MANAGEMENT SYSTEM (SEMS)

IPU is located within the County of Los Angeles and will assist in the functioning of Emergency Operations Center if required depending on the situation and the request from the lead agency. As a local governmental agency, IPU has planning, communication, and coordination obligations pursuant to the California Office of Emergency Services' Standardized Emergency Management System ("SEMS") Regulations, adopted in accordance with Government Code section 8607. The SEMS Regulations specify roles, responsibilities, and structures of communications at five different levels: field response, local government, operational area, regional, and state. Pursuant to this structure, IPU will coordinate and communicate with the relevant safety agencies as well as other relevant local and state agencies as required. The IPU via LACFD and LACDPW works closely with Los Angeles County to coordinate emergency operations.

Los Angeles County coordinates with Federal, State, and local agencies to prepare, respond and recover from emergencies and natural disasters.

- Los Angeles County ("LAC") also coordinates and maintains the county Emergency Operations Center ("EOC"). The EOC can be used during a major incident such as a wildfire to carry out the principles of emergency preparedness and emergency management between multiple agencies.
- LAC has a direct link to the California Governor's Office of Emergency Services during disasters or any other critical incident. In the event of a major incident LAC can work with CAL OES to obtain a Presidential proclamation.

- LAC works closely with other local agencies and acts as a point of contact for local agencies to California Governor's Office of Emergency Services.

LAC has identified wildland fires as one of the specific hazards that impact the county. LAC's Board of Supervisors has approved emergency and disaster plans and annexes (https://ceo.lacounty.gov/emergencydisaster-plans-and-annexes/), including the Operational Area Emergency Response Plan (OAERP) to establish the coordinated emergency management system for prevention, protection, response, recovery and mitigation activities within the Operational Area. LAC's OAERP conforms to SEMS.

Under the SEMS structure, a significant amount of preparation is done through advanced planning at the county level, including the coordination of public, private, and nonprofit organizations. LAC's Board of Supervisors established the LAC Operational Area on July 5, 1995. LAC serves as the lead agency of this Operational Area and is guided by the Los Angeles County Disaster Council that is made up of representatives of local agencies. The Operational Area includes local and regional organizations that bring relevant expertise to the wildfire prevention and recovery planning process. It is divided into eight Disaster Management Areas to coordinate management, planning, training, and preparedness actions. The IPU is located in Disaster Management Area D. Area D participants and partners include the cities of Arcadia, Azusa, Baldwin Park, Bradbury, Claremont, Covina, Diamond Bar, Duarte, El Monte, Glendora, Irwindale, La Puente, La Verne, Monrovia, Pomona, Rosemead, San Dimas, Sierra Madre, South El Monte, Temple City, Walnut, and West Covina; County of Los Angeles Sheriff's Department; Hacienda La Puente Unified School District; the American Red Cross; and California State Polytechnic University, Pomona.

Pursuant to the SEMS structure, IPU will participate if required in annual training exercises.

IV. WILDFIRE RISKS AND DRIVERS ASSOCIATED WITH DESIGN, CONSTRUCTION, OPERATION, AND MAINTENANCE

A. BACKGROUND

Like most areas of Southern California, the City and IPU service territory typically experiences cool, wet winters and hot dry summers, creating extreme fire conditions from May through October, especially during the Santa Ana wind conditions which may happen outside the hot months. Daily temperatures during the fire season from June to October are usually above 90 degrees Fahrenheit, and humidity can vary from day to day, with some days experiencing humidity in the single digits. The IPU service area is mostly an

urban area without many trees or any wooded/brush area except for the Industry Business Center ("IBC"). The IBC is an area of approximately 600 acres that is currently under development. The area currently consists of vacant land with some dry brush or grass on the project site. There are no IPU overhead lines in that area or its vicinity with no significant risk to initiate any wildfire. The City is working to keep the grass areas of the IBC green, and reduce potential for dry brush. All existing electrical lines at the IBC are underground and also will be underground in future.

As mentioned earlier, the potential and risk of wildfire originated from the electrical lines owned, operated, and maintained by IPU is low, because the IPU's entire 12,000- volt electric distribution system is located underground in conduit and vaults, and the IPU has no overhead distribution lines. Historically, underground lines have not been associated with catastrophic wildfires.

B. ENTERPRISE SYSTEM, OUTAGES AND OPERATIONAL/SAFETY RISK

As previously mentioned, IPU is a very small publicly owned utility, and below the minimum requirements of National Electric Reliability Council ("NERC") and Western System Coordinating Council (WSCC) of 25 megawatts, to maintain records and report power outages with annual reliability matrixes. IPU does not own, operate, or maintain any transmission lines and all distribution lines are underground and future distribution lines will be underground. Based on the foregoing, the IPU has determined that its electrical lines and equipment do not pose a significant risk of catastrophic wildfire. Despite this low risk, IPU takes appropriate actions to help the region prevent and respond to the increasing risk of devastating wildfires. Some of the actions include:

1. IPU will purchase and use better quality equipment such as underground distribution cable with Ethylene Propylene (EPR) Insulation instead of Crosslinked Polyethylene (XLP) which is less prone to premature cable failure and potential for arcing.

2. More frequent detailed distribution system inspection cycles than required by CPCU GO 165. For example, CPCU GO 165 requires detailed distribution inspections on a five-year cycle but the IPU will perform that inspection on a three-year cycle. That inspection will include a visual and detailed inspection of the current condition and to confirm that all the underground structures, pad mount switches and pad mount transformers are functioning normal and catch anything which isn't functioning as designed and take action to correct it.

C. PARTICULAR RISKS AND RISK DRIVERS ASSOCIATED WITH TOPOGRAPHIC AND CLIMATOLOGICAL RISK FACTORS

Within IPU's service territory and the surrounding areas, the primary risk drivers for wildfire are the following:

- Extended drought - Southern California just went through extended drought condition starting from December 27, 2011 to March 5, 2019 and lasted 376 weeks. It can happen again in future.
- Vegetation type - The IPU service territory is mostly urban with very few trees on the city streets. The IBC Development that is approximately 600 acres has vacant land with dry grass and other brush on site and adjacent to it. Industry Hills near Pacific Palms Hotel and Expo areas have lot of trees and dry brush.
- Vegetation Density - Low to moderate except in the Industry Hills and Expo area
- Weather - Summer is usually hot dry with daily temperatures usually above 90-degree Fahrenheit from June to October months. Winter is cool and wet and most of 14.68 average annual rain between months of November and March. Average annual temperature is 77 degrees Fahrenheit. Humidity can vary from day to day and can be in single digits in hot summer months from May to October and creating extreme fire conditions in combination with Santa Ana Winds.
- High winds - Santa Ana Wind conditions normally happen during summer months from May to October and can also happen outside the hot months. Santa Ana Winds are strong gusty winds with speed which can range from 30 miles per hour to as much as 90 miles per hour.
- Terrain - there is more significant terrain variation at the IBC and at the Pacific Palms Resort area.
- Changing Weather Patterns (Climate Change) - It is believed that the global warming has impact on the climate and increasing potential of more wildfires.
- Communities at Risk - Besides the City of industry, other adjacent cities of Diamond Bar, Walnut and La Puente may be impacted but the chances are slim.
- Fire History- There is no known history of wildfires in the area served by IPU.

V.WILDFIRE PREVENTATIVE STRATEGIES AND PROGRAMS

A. CPUC HIGH FIRE THREAT DISTRICT

IPU did not directly participate in the development of the CPUC's Fire-Threat Map, which designates a High-Fire Threat District.

IPU has reviewed the proposed boundaries of the High Fire Threat District and confirmed that, based on local conditions and historical fire data, all of IPU's service territory was properly excluded, and has no tier 2 or tier 3 fire threat area as of June 2021. IPU does not need to incorporate the High Fire Threat District into its construction, inspection, maintenance, repair, and clearance practices, until CPUC Fire Threat Map is revised to show any area served by IPU falls with it, but IPU will continue to follow those as an extra precautionary measure where applicable.

B. DESIGN AND CONSTRUCTION STANDARDS

IPU's electric facilities are designed and constructed to meet or exceed the relevant federal, state, or industry standard. IPU follows CPUC General Orders (GO) 128 as a key industry standard for design and construction of underground electrical facilities. Additionally, IPU monitors and follows, as appropriate, the National Electric Safety Code.

C. ENHANCED INSPECTIONS

Inspections and follow up with action items to perform required maintenance plays an important role in wildfire prevention. Currently, the IPU patrols its distribution system regularly and plans to increase the detailed inspections frequency to exceed GO165 requirements. IPU is considering detailed inspection on a three-year cycle as compared to the five years required by GO165.

Some of inspection activities may include more detailed inspections of pad mounted equipment such as switch blades, rusting and any other abnormal thing which can cause short- circuits and failures with an initiating arc. Similarly, for underground structures we will perform infrared tests on the cable terminators or 600 amp and 200-amp elbows if required.

If IPU staff discovers a facility in need of repair that is owned by an entity other than IPU, the IPU may issue a notice to repair to the facility owner and work to ensure that necessary repairs are completed promptly.

D. DEENERGIZATION

IPU has the authority to preemptively shut off power due to fire-threat conditions, however, this option is not likely to be used and will only be used in extraordinary circumstances. Due to the minimal risk of IPU' s electrical supply facilities causing a power-line ignited wildfire, IPU is not adopting specific protocols for de-energizing any portions of its electric distribution system. IPU will re-evaluate this determination in future updates to this Wildfire Mitigation Plan.

E. SITUATIONAL AWARENESS

Presently IPU is considering installing smart electrical meters with automated metering infrastructure ("AMI") to track individual customer power outages along with the outage notification system as part of the Meter Data Management ("MDM") system. IPU's plan to upgrade to AMI and MDM would help better provide situational awareness of the condition of the electrical distribution system at all times.

IPU staff monitors weather reports from the local radio and television stations and is alert during the Santa Ana Winds and other high fire threat conditions and will attempt to not schedule any field work to be performed as a precautionary measure unless it is absolutely necessary.

F. OPERATIONAL PRACTICES

IPU will operate the electrical distribution system in a manner that will minimize potential wildfire risks including taking all reasonable and practical actions to minimize the risk of a catastrophic wildfire caused by the IPU's electrical facilities. As recommended by the third-party evaluator, IPU will hire a consultant to perform a relay protection coordination study for each of the six 12,000- Volt distribution feeders originating from the Waddingham Substation. This study will include protection coordination of substation feeder relays with the downstream protective devices of fuses in the pad mount switches and pad mounted transformers and fine- tune the relay settings to make sure that any electrical fault on these distribution lines is cleared as quickly as possible and any faulted part of circuit isolated to reduce the potential risk of any arc. Staff will take corrective actions for deficiencies when the staff witnesses or is notified of improperly installed or maintained fire protection measures. In general, during high wildfires, threats period (red flag warnings) the IPU will perform only essential work.

G. PUBLIC SAFETY AND NOTIFICATION

The IPU will do the following to communicate with the community during high fire threat periods and disaster.

- Coordinate with LACFD and LAC Sheriff's Department
- Develop communication protocol for notification to community and social media

VI. RESTORATION OF SERVICE

In the event of a wildfire or other emergency event, IPU will coordinate the activities necessary to restore electrical service to all parties as required. The IPU will coordinate with SCE on the restoration of the three interconnection points of Waddingham 66,000 volt to 12,000-Volt Substation, Anaheim- Puente 12,000 volt and Pacific Palms Hotel 12,000-volt interconnections. Restoration of service in each specific incident may be different but the steps taken will be similar to begin the restoration process. The steps are as follows:

Assessment.

The IPU will patrol each line segment to determine the extent of damage that has occurred. The patrol will include the assessment of access to the equipment, clean/up and debris removal personal protective equipment (PPE) requirements of the crews. The IPU will work with the LACFD and LACSD as required to make sure area is deemed safe to restore electrical power.

Planning.

After the preliminary and initial assessment, IPU Staff will discuss the Plan and needed work to restore power. Any individual customer that has damage to its electrical service panel or transformer will be isolated from the pad mounted switch. Teams will focus on prioritizing the restoration efforts to most critical infrastructure needs first, such as critical water and communication facilities, Pacific Palms Hotel and Waddingham Substation etc.

Mobilize and Action.

Based on the complexity of restoration efforts, the IPU will coordinate the crews and material needs as required. IPU has some contracts with material vendors for material needs but in the event of widespread catastrophic damage in the region it may become a challenge to acquire the needed material.

Restoration.

Rebuild effort will start as soon as the areas become safe to access. Initial effort will be to restore the interconnections with SCE, first starting from the Waddingham Substation and then all 12,000- volt distribution circuits. Depending upon case by case, rebuilding or any demolition required may be done simultaneously or rebuilding first and demolitions later if safe to do so. After all distribution circuits are restored, all individual customers will be restored to power except those which have sustained damage and isolated from the circuit. After the repair or replacement of transformer and /or electrical service panel and inspection certification if needed, the remaining customers will be restored.

VII. EVALUATING OF THE PLAN

A. METRICS AND ASSUMPTIONS FOR MEASURING PLAN PERFORMANCE

IPU tracks two metrics to measure the performance of this Wildfire Mitigation Plan: (1) number of fire ignitions; and (2) wires down within the service territory.

METRIC 1: FIRE IGNITIONS

For purposes of this metric, a fire ignition is defined as follows:

- IPU facility was associated with the fire;
- The fire was self-propagating and of a material other than electrical and/or communication facilities;
- The resulting fire traveled greater than one linear meter from the ignition point; and
- IPU has knowledge that the fire occurred.

For this metric, IPU will provide the number of fires that occurred that were less than 10 acres in size. Any fires greater than 10 acres will be individually described.

METRIC 2: WIRES DOWN

The second metric is the number of distribution and transmission wires downed within IPU service territory. Since IPU has no overhead transmission and distribution lines and this metric is not applicable to IPU.

IPU will not normalize this metric by excluding unusual events, such as severe storms. Instead, IPU will supplement this metric with a qualitative description of any such unusual events.

B. METRICS FOR 2021 PLAN

The metrics for calendar years 2019 and 2020 are the following:

Year	Fire Ignitions	Wires Down Events
2019	0	0
2020	0	0

C. IMPACT OF METRICS ON PLAN

In the initial years, IPU anticipates that there will be relatively limited data gathered through these metrics. However, as the data collection history becomes more robust, IPU will be able to identify areas of its operations and service territory that are disproportionately impacted. IPU will then evaluate potential improvements to the Plan.

D. MONITORING AND AUDITING THE PLAN

This Wildfire Mitigation Plan will be presented to IPUC on an annual basis. Additionally, a qualified independent evaluator will review the Plan and provide any suggested improvements at least once every three years. If required, third party evaluator will present a report on this Plan to the IPUC.

E. IDENTIFYING AND CORRECTING DEFICIENCIES IN THE PLAN

IPU Staff, inspectors and contractors are encouraged to identify Wildfire Mitigation Plan deficiencies to the IPU – Operations Manager as soon as possible when observed. The Operations Manager will evaluate each reported deficiency and if it is determined to be a valid deficiency, it will be entered into a log with the following information:

- Date the deficiency was discovered
- Description of deficiency
- Source identifying the deficiency
- Priority based on the severity
- Corrective action required and with deadline to accomplish
- Assigned staff for corrective action
- Date corrective action completed

F. MONITORING THE EFFECTIVENESS OF INSPECTIONS

As previously mentioned, IPU will endeavor to exceed the GO165 requirement to conduct a detailed inspection on a five-year cycle, and instead, perform that inspection on a three-

or four-year cycle. Also, IPU is currently performing GO165 inspections and making a note of the observations and will review those after the inspection is completed. Anything found that need improvement or appear hazardous will be documented and will be given a priority with a work order and that work order will be tracked to the closure.