

**CLP Power**

# **Serious Injuries and Fatalities (SIF) Prevention Framework**

中華電力

嚴重受傷及致命危害的防範框架

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# Definition of SIF

## Serious Injuries

### Life-Threatening

- Work-related injury or illness that required immediate life-preserving rescue action, and if not applied immediately would likely have resulted in the death of that person.

### Life-Altering

- Work-related injury or illness that resulted in a permanent and significant loss of a major body part or organ function that permanently changes or disables that person's normal life activity.

## Fatalities

- Work-related fatal injury or illness.

# Definition of SIF

## Example of Serious Injuries

- Amputation
- Concussions and / or cerebral hemorrhages
- Compound bone fractures
- Herniated disk (neck or back)
- 2nd degree burn (>10% body surface) or 3rd degree burns
- Eye injuries resulting in eye damage or loss of vision
- Acute and permanent hearing loss of more than 40 dB in any one ear

## Actual SIF

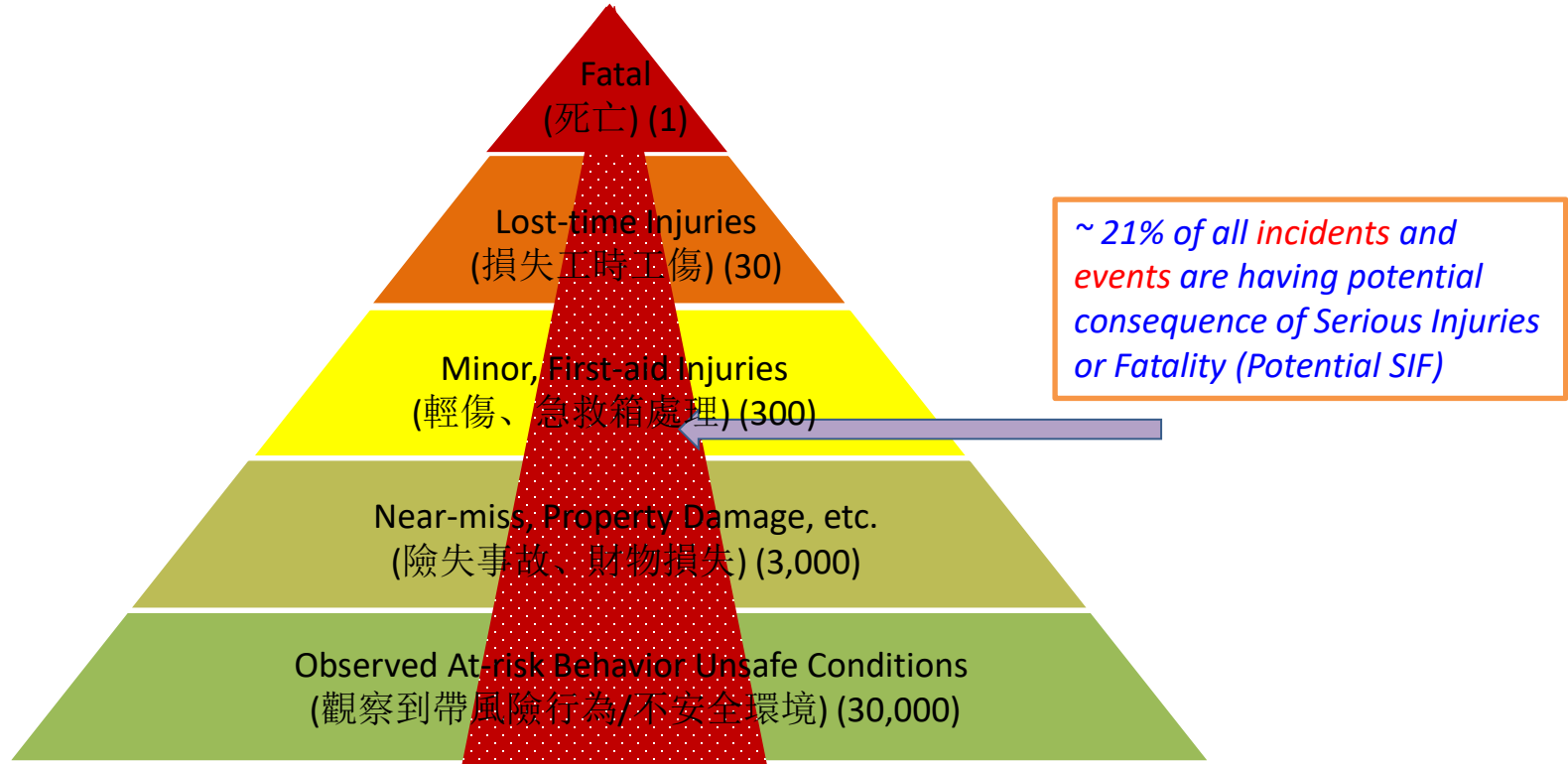
- Actual occurrence of incident resulted in serious injuries or fatality

## Potential SIF

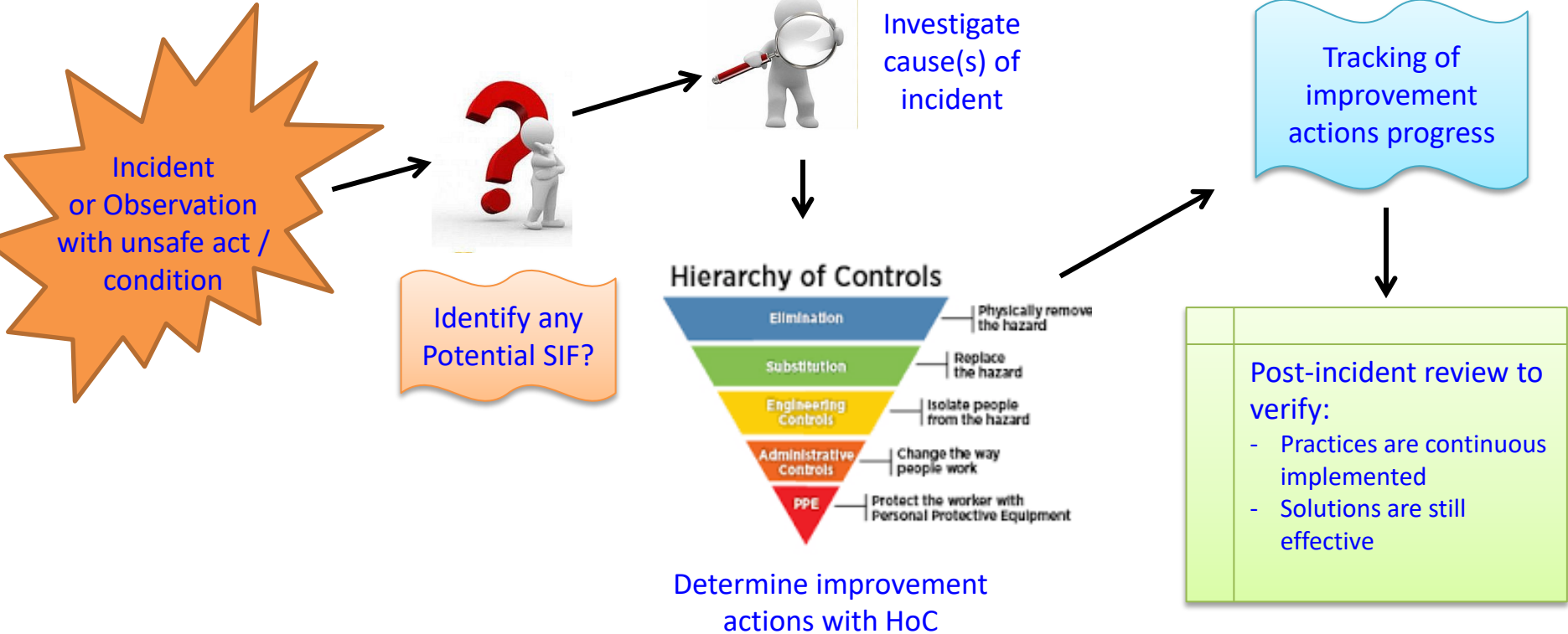
- An Incident or Event that might result in serious injury or fatality

# Application of SIF Prevention Strategy on Incidents / Events

## New Way of Thinking about Safety Triangle



# Application of SIF Prevention Strategy on Incidents / Events



# Application of SIF Prevention Strategy on Incidents / Events

Analyse the cause(s) of all incidents / events with Potential SIF to obtain insight to develop the safety initiatives to

- Further enhance our system
- Uplift the capabilities of our colleagues / contractors
- Explore new technology to reduce the SIF risk such as drone or robot application



Sources: youtube.com



Sources: www.hk01.com

# SIF Prevention Framework

Overall SIF prevention framework also embedded in our Safe System of Work (SSoW)

*Site Supervision and Monitoring with Independent Assurance Inspection*

*Site Implementation of Critical Control Measures*



# Task and Hazard Analysis

Modular Approach adopted in our task and hazard analysis

- Each critical risk (with Potential SIF hazard) task as a module with Modular Risk Assessment (MRA) and Modular Safe Work Procedure (MSWP)
- Work steps stated in MSWP that can prevent, eliminate or mitigate Potential SIF in the critical risk task are defined as Critical Control Measures (CCMs)



Working at  
Height  
(WH)



Confined  
Spaces  
(CS)



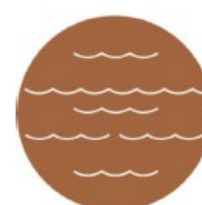
Lifting  
Operations  
(LO)



Hazardous  
Substances  
(HS)



Excavation  
(EC)



Working  
Around Water  
(AW)



Vehicle and  
Mobile  
Equipment  
(VM)

Examples of Critical Risk Activity

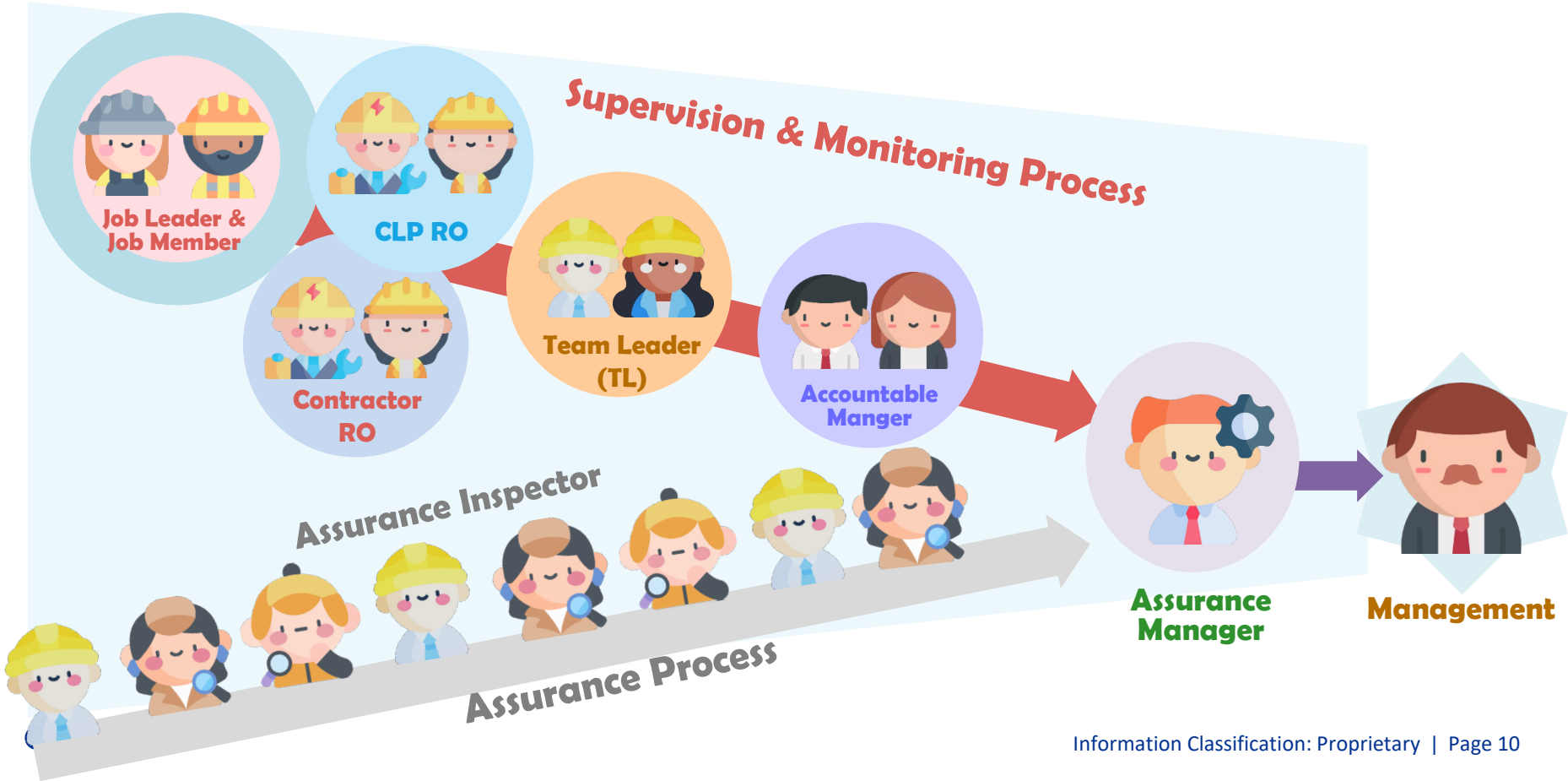


# Site Implementation of Critical Control Measures (CCMs)

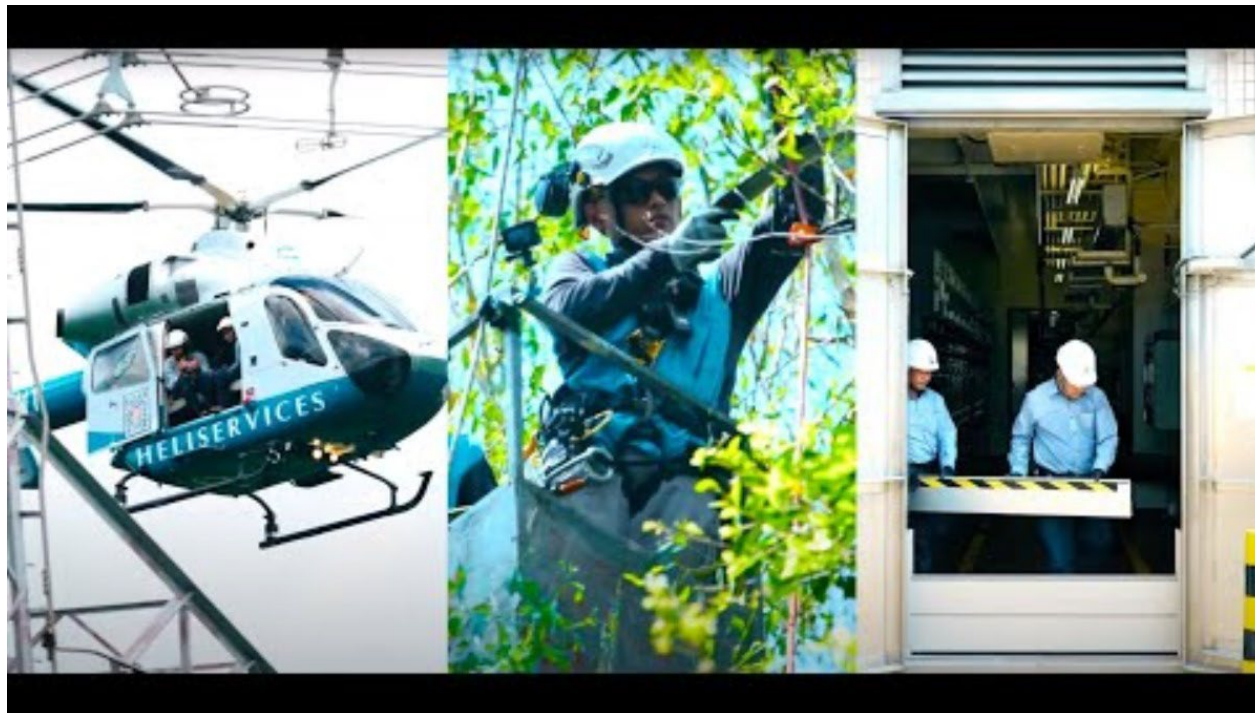
- Each work steps with CCMs are stated in the daily Work Planning Form by Responsible Engineer
- Job Leader conducts the Point of Work Assessment (PoWA) with the work team at work site and checks all the CCMs are implemented prior the work commencement



# Supervision and Monitoring and Independent Assurance Inspection



# Preparation of Adverse Weather



Sources: [youtube.com](https://www.youtube.com)

# Thank You