

# RESILIENCY COMPLIANCE PLAN RENEWABLE ENERGY (RCP-RE)

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**e – POWER MO**

e – Secure Mo

e – Safety Mo

e – Diskarte Mo



# OUTLINE OF PRESENTATION

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1. What are the **existing** compliances in the RE operations under the Resiliency Compliance Plan (RCP)?

1. What are the **other compliances** that need to be addressed under the RCP?



# RESILIENCY COMPLIANCE PLAN TEMPLATE

CATEGORIES	Project Name	Project Description	Project Benefit	Project Start Date	Project Completion Date	Total Project Cost	Status (P, OG, PL, C)*	Yearly Disbursement			
								2017	2018	2019	2020 and Beyond
<b>1. STRENGTHENING INFRASTRUCTURE</b>											
<b>2. SYSTEMS</b> ➤ Persons ➤ Facilities ➤ Standard Operating Procedures (SOPs) ➤ Product / Content											
<b>3. STOCKPILING</b> ➤ Inventory											
<b>4. RESPONSE &amp; RECOVERY</b> ➤ Pre ➤ During ➤ Post											
<b>5. OTHERS</b>											

Status : **P**- proposed, **OG** – on-going, **PL** – pipeline, **C** - completed



# WHAT WE ARE DOING?

CATEGORIES	PROJECT NAME
<b>SYSTEMS</b>	<b>DC 2012-11-0009</b> <b>RENEWABLE ENERGY SAFETY, HEALTH AND ENVIRONMENT RULES AND REGULATIONS (RESHERR)</b>



# WHAT WE ARE DOING?

CATEGORIES	PROJECT DESCRIPTION
<b>SYSTEMS</b>	ENSURE ADEQUATE SAFETY AND PROTECTION AGAINST <b>HAZARDS</b> TO HEALTH, LIFE AND PROPERTY AS WELL AS POLLUTION OF AIR, LAND AND WATER FROM RENEWABLE ENERGY OPERATIONS.



# WHAT WE ARE DOING?

CATEGORIES	PROJECT BENEFIT
<b>SYSTEMS</b>	SAFETY AND PROTECTION ( <b>RESILIENCY</b> ) AGAINST <b>HAZARDS</b> TO HEALTH, LIFE AND PROPERTY AS WELL AS POLLUTION OF AIR, LAND AND WATER FROM RENEWABLE ENERGY OPERATIONS.





# WHAT WE ARE DOING?

CATEGORIES	PROJECT START DATE
<b>SYSTEMS</b>	DATE ISSUED : <b>NOVEMBER 21, 2012</b> EFFECTIVITY DATE : <b>December 2012</b>



# WHAT WE ARE DOING?

CATEGORIES	PROJECT COMPLETION DATE
<b>SYSTEMS</b>	<b>CONTINUING</b>





# WHAT WE ARE DOING?

CATEGORIES	TOTAL PROJECT COST
<b>SYSTEMS</b>	



# WHAT WE ARE DOING?

CATEGORIES	PROJECT STATUS
<b>SYSTEMS</b>	ON-GOING



# WHAT WE ARE DOING?

CATEGORIES	YEARLY DISBURSEMENTS			
	2017	2018	2019	2020 and Beyond
<b>SYSTEMS</b>				



# WHAT WE ARE DOING?

CATEGORIES	PROJECT NAME
<b>SYSTEMS</b>	<ol style="list-style-type: none"><li>1. Risk Assessments and Evaluation Plan (Rule 2, Section 5.5, RESHERR)</li><li>2. Safety, Health and Environmental Program (Rule 3, RESHERR)<ul style="list-style-type: none"><li>• Safety, Health and Environment Organization/Committee (Section 10/12)</li><li>• Safety Engineer/Officer (Section 11)</li></ul></li><li>3. Safety and Health Training Program (Rule 5, RESHERR)</li><li>4. Health Program (Rule 6, RESHERR)</li><li>5. Code of Practice (Rule 2, Section 8, RESHERR)</li><li>6. Termination and Abandonment Plan (RESC)</li></ol>



# WHAT NEEDS TO BE DONE?

## CATEGORIES

## Project Name

### STRENGTHENING INFRASTRUCTURE

Plans, programs, projects and activities to address the following hazards:

1. Typhoons
2. Earthquake
3. Flood
4. Drought
5. Landslide/Erosion
6. Lightning
7. Storm surge
8. Others



# WHAT NEEDS TO BE DONE?

## CATEGORIES

## Project Name

### STOCKPILING

1. Strategic Stockpiling Plan (fuel, spare materials, warehousing)
2. Others





# WHAT NEEDS TO BE DONE?

## CATEGORIES

## Project Name

### RESPONSE AND RECOVERY

1. Emergency Plan
2. Rehabilitation Plan
3. Capacity Building Plan (drills and exercises)
4. Others



# DROUGHT

## I. Local Planning and Regulations

- Assess Vulnerability to Drought Risk
- Monitor Drought Conditions
- Monitor Water Supply
- Plan for Drought
- Require Water Conservation During Drought Conditions
- Prevent Overgrazing

## II. Structure and Infrastructure Projects

- Retrofit Water Supply Systems

## III. Natural Systems Protection

- Enhance Landscaping and Design Measures



# EARTHQUAKE

## I. Local Planning and Regulations

- **Adopt and Enforce Building Codes**
- Incorporate Earthquake Mitigation into Local Planning
- Map and Assess Community Vulnerability to Seismic Hazards
- Conduct Inspections of Building Safety

## II. Structure and Infrastructure Projects

- Protect Critical Facilities and Infrastructure
- Implement Structural Mitigation Techniques

## III. Education and Awareness Programs

- Increase Earthquake Risk Awareness
- Conduct Outreach to Builders, Architects, Engineers, and Inspectors
- Provide Information on Structural and Non-Structural Retrofitting



# FLOODS

## I. Local Planning and Regulations

- Incorporate Flood Mitigation in Local Planning
- Form Partnerships to Support Floodplain Management
- Limit or Restrict Development in Floodplain Areas
- Adopt and Enforce Building Codes and Development Standards
- Improve Stormwater Management Planning
- Adopt Policies to Reduce Stormwater Runoff
- Improve Flood Risk Assessment
- Join or Improve Compliance with NFID
- Manage the Floodplain Beyond Minimum Requirements

## II. Structure and Infrastructure Projects

- Remove Existing Structures from Flood Hazard Areas
- Improve Stormwater Drainage System Capacity
- Conduct Regular Maintenance for Drainage Systems and Flood Control Structures
- Elevate or Retrofit Structures and Utilities
- Floodproof Structures
- Protect Infrastructure
- Protect Critical Facilities
- Construct Flood Control Measures



# FLOODS

## III. Natural Systems Protection

- Protect and Restore Natural Flood Mitigation Features
- Preserve Floodplains as Open Space
- Increase Awareness of Flood Risk and Safety

## IV. Education and Awareness Programs

- Educate Property Owners about Flood Mitigation Techniques





# LANDSLIDE

## I. Local Planning and Regulations

- Map and Assess Vulnerability to Landslides
- Manage Development in Landslide Hazard Areas

## II. Structure and Infrastructure Projects

- Prevent Impacts to Roadways
- Remove Existing Buildings and Infrastructure from Landslide Hazard Areas





# LIGHTNING

## I. Structure and Infrastructure Projects

- Protect Critical Facilities and Equipment

## I. Education and Awareness Programs

- Conduct Lightning Awareness Programs



# STORM SURGE

## I. Local Planning and Regulations

- **Adopt Building Codes and Development Standards**
- Improve Land Use Planning and Regulations
- Minimize Risk to New Facilities and Infrastructure
- Map and Assess Vulnerability to Storm Surge

## II. Structure and Infrastructure Projects

- Construct Structural Control Techniques
- Protect Infrastructure and Critical Facilities

## III. Natural Systems Protection

- Protect and Restore Natural Buffers

## IV. Education and Awareness Programs

- Provide Information on High-Risk Areas



# SUBSIDENCE

## I. Local Planning and Regulations

- Map and Assess Vulnerability to Subsidence
- Manage Development in High-Risk Areas
- Consider Subsidence in Building Design
- Monitor Subsidence Risk Factors

## II. Structure and Infrastructure Projects

- Remove Existing Structures from Subsidence Hazard Areas



# TYPHOONS/TORNADO

## I. Local Planning and Regulations

- Encourage Con Require Wind-Resistant
- Building Technique Construction of Safe Rooms

## II. Education and Awareness Programs

- Conduct Typhoon/Tornado Awareness Activities



# WHAT NEEDS TO BE DONE?

**Deadline of Submission of RCP**  
**July 31, 2018**



# Thank You!

## *e-Diskarte Mo!*

## #KuryenteMo #eGenerateMo



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