ILLINOIS POWER GENERATING COMPANY

NEWTON POWER PLANT

CITY OF NEWTON, JASPER COUNTY, ILLINOIS

Emergency Action Plan (EAP)

40 C.F.R. § 257.73(a)(3), Ill. Adm. Code 845.520
Coal Combustion Residual (CCR) Impoundment
& Related Facilities

- Primary Ash Pond (NID # IL50719) (IEPA W0798070001-01)

Revision Date: September 16, 2021

Qualified Professional Engineer Certification; Emergency Action Plan for the Newton Power Plant Primary Ash Pond

In accordance with 40 C.F.R. § 257.73(a)(3)(iv) and 35 Ill. Adm. Code 845.520(e), the owner or operator of a CCR unit that is required to prepare a written Emergency Action Plan under 40 C.F.R. § 257.73(a)(3) and 35 Ill. Adm. Code 845.520(a) must obtain a certification from a qualified professional engineer stating that the written Emergency Action Plan meets the requirements of 40 C.F.R. § 257.73(a)(3) and 35 Ill. Adm. Code 845.520.

I, Phil Morris, being a Professional Engineer in good standing in the State of Illinois, do hereby certify, to the best of my knowledge, information, and belief that:

1. the information contained in this Emergency Action Plan was prepared in accordance with the accepted practice of engineering; and

2. this Emergency Action Plan meets the requirements of 40 C.F.R. § 257.73(a)(3) and 35 Ill. Adm. Code 845.520.

Phil Morris
Senior Director, Corporate Environmental

9/27/21
Date

NEWTON POWER PLANT
EMERGENCY ACTION PLAN
CCR IMPOUNDMENT & RELATED FACILITIES

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PART I – EAP NARRATIVE AND EXHIBITS

1 STATEMENT OF PURPOSE

The Newton Power Plant (Power Plant) is located near the City of Newton in Jasper County, Illinois. The location is shown in Figure 1-1. The Power Plant is a coal-fired electricity producing power plant owned and operated by the Illinois Power Generating Company, a subsidiary of Dynegy. This Emergency Action Plan (EAP) was prepared in accordance with 40 CFR § 257.73(a)(3) and covers the following Coal Combustion Residual (CCR) surface impoundment located at the site:

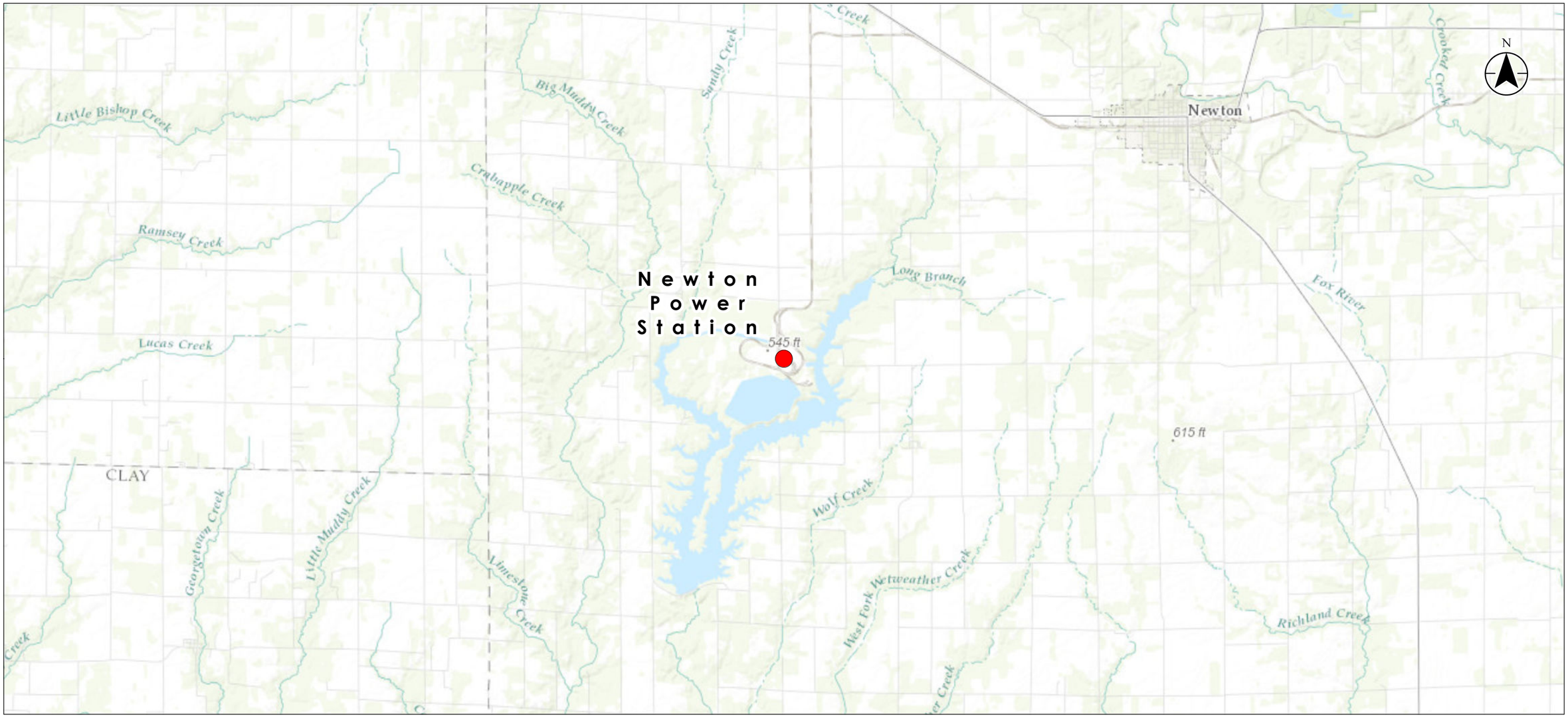
- Primary Ash Pond (NID # IL50719) (IEPA # W0798070001-01)

The location of this impoundment is shown in Figure 1-2. Section 6 of this EAP includes a description of the impoundment.

The purpose of this Emergency Action Plan (EAP) is to:

1. Safeguard the lives, as well as to reduce property damage, of citizens living within potential downstream flood inundation areas of the CCR impoundment and related facilities at the Newton Power Plant.
2. Define the events or circumstances involving the CCR impoundment and related facilities at the Newton Power Plant that represent atypical operating conditions that pose a safety hazard or emergency and how to identify those conditions.
3. Define responsible persons, their responsibilities, and notification procedures in the event of a safety emergency.
4. Provide contact information of emergency responders.
5. Identify emergency actions in the event of a potential or imminent failure of the impoundment.
6. Identify the downstream area that would be affected by failure of the impoundment.
7. Provide for effective facility surveillance, prompt notification to local Emergency Management Agencies, citizen warning and notification responses, and preparation should an emergency occur.

Information provided by Illinois Power Generating Company was utilized and relied upon in preparation of this report.



0 1 2 3 Miles

1:126,720 (1" = 2 miles at original document size of 11x17)

Notes

1. Coordinate System: WGS 1984 Web Mercator Auxiliary Sphere
2. Basemap Source: Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Stantec DYNEGY

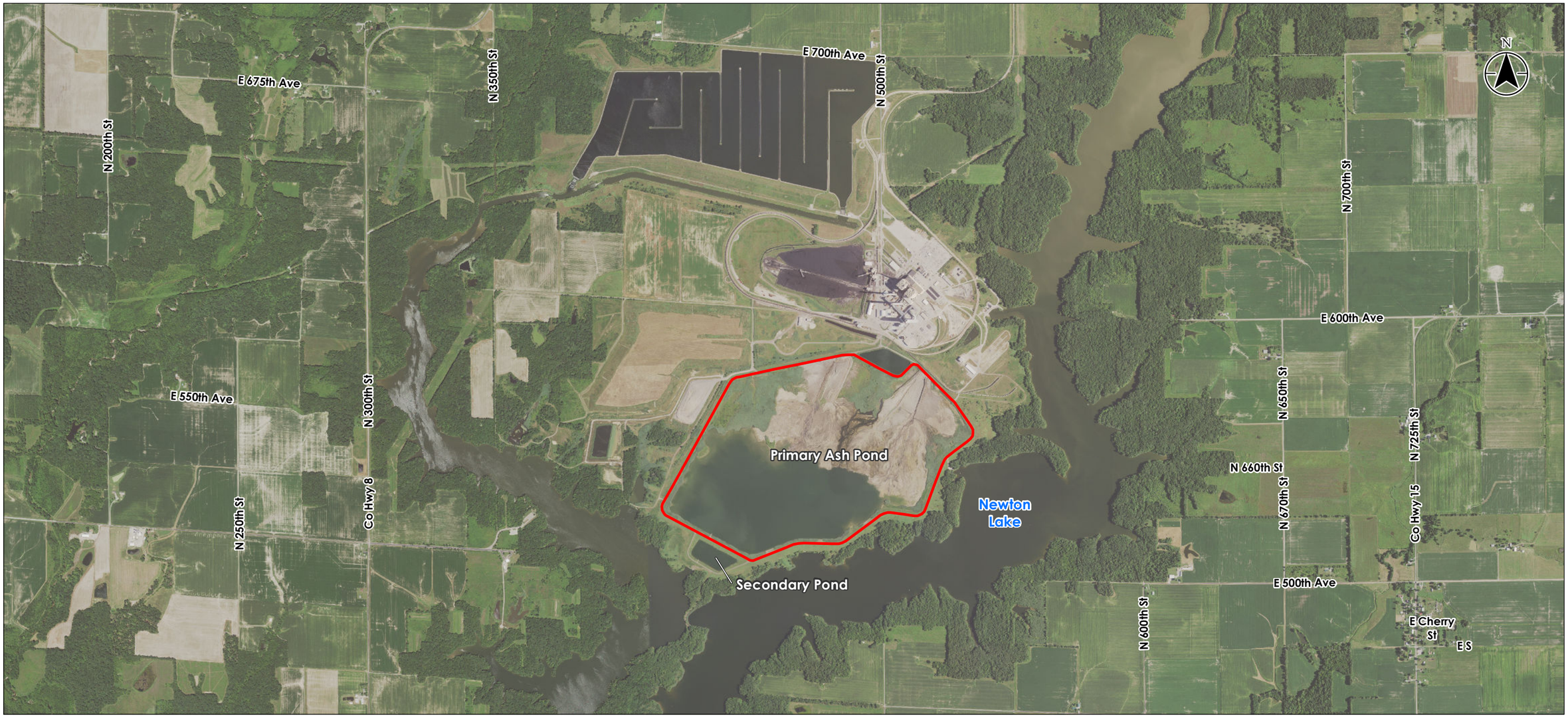
Project Location
Latitude: 38.936621
Longitude: -88.277038
Jasper County, Illinois

175605019
Prepared by EC on 2017-03-08
Technical Review by TS on 2017-03-27
Independent Review by MM on 2017-03-20

Client/Project
Newton Power Station
Emergency Action Plan

Figure No.
1-1

Title
Location Map



Legend

CCR Surface Impoundment Boundary

0 0.5 1 Miles

1:31,680 (1" = 0.5 miles at original document size of 11x17)

Notes

1. Coordinate System: WGS 1984 Web Mercator Auxiliary Sphere
2. Basemap Source: USDA-FSA-APFO Aerial Photography Field Office, Illinois State Geological Survey
3. Impoundment Boundaries Provided by Client (Dated 9/9/2015)

Stantec DYNEGY

Project Location
Latitude: 38.936621
Longitude: -88.277038
Jasper County, Illinois

175666013
Prepared by EC on 2017-03-08
Technical Review by TS on 2017-03-27
Independent Review by MM on 2017-03-20

Client/Project
Newton Power Station
Emergency Action Plan

Figure No.
1-2

Title
CCR Impoundment

St. Louis 175666013\...Appendix B.mxd

2 COMMUNICATION

To facilitate understanding among everyone involved in implementing this EAP, four response levels are used to identify the condition of an impoundment. These are:

Response Levels:

- **Level 0:** Normal conditions and routine operations, including surveillance and initial investigation of unusual conditions and effects of storm events.
- **Level 1:** Potentially hazardous condition exists, requiring investigation and possible corrective action.
- **Level 2:** Potential failure situation is developing; possible mode of failure is being assessed; corrective measures are underway.
- **Level 3:** Failure is occurring or is imminent, public protective actions are required.

The 4-Step Incident Response Process is outlined in Figure 2-1. This should be used in conjunction with the Notification Flowchart (Figure 2-2) and EAP Decision Tree (Figure 2-3). Section 4 provides guidance tables for determining Response Levels and a table providing emergency actions to be taken given various situations. Table 2-1 lists contact information for the emergency responders.

Figure 2-1. Summary/Sequence of Tasks 4-Step Incident Response Process

Step 1: Detection, Evaluation, and Response Level Determination

Sequence of Tasks:

- Notify EAP Coordinator, Plant Manager, and Dam Safety Manager of unusual condition detected and confer on next steps needed.
- Conduct technical evaluation of conditions as needed.
- Determine Response Level based on evaluation. **(Table 4-1)**
- Reset Response Level as revised evaluations warrant.

Step 2: Notification

Sequence of Tasks:

- Notify authorities, designated personnel, and external response partners of change in Response Level, using the Notification Flowchart. **(Figure 2-2)**
- *Re-notify authorities, designated personnel, and external response partners as Response Level is changed*.

Step 3: Emergency Actions

Sequence of Tasks:

- Perform emergency actions with goal of saving the impoundment and minimizing impacts to life, property, and environment. **(Table 4-3)**
- Take continuous actions to include situation assessment, information sharing, remediation, and public safety advisories or warnings, as warranted.
- *Revise action plan as changes in conditions warrant*.

Step 4: Follow-up

Sequence of Tasks:

- Document conditions and decisions in the Emergency Incident Log.
- Notify authorities, designated personnel, and external response partners that condition is stabilized; limit incident termination declarations to conditions at the site.
- Conduct and document after-action review of incident and response.

Figure 2-2. Notification Flowchart

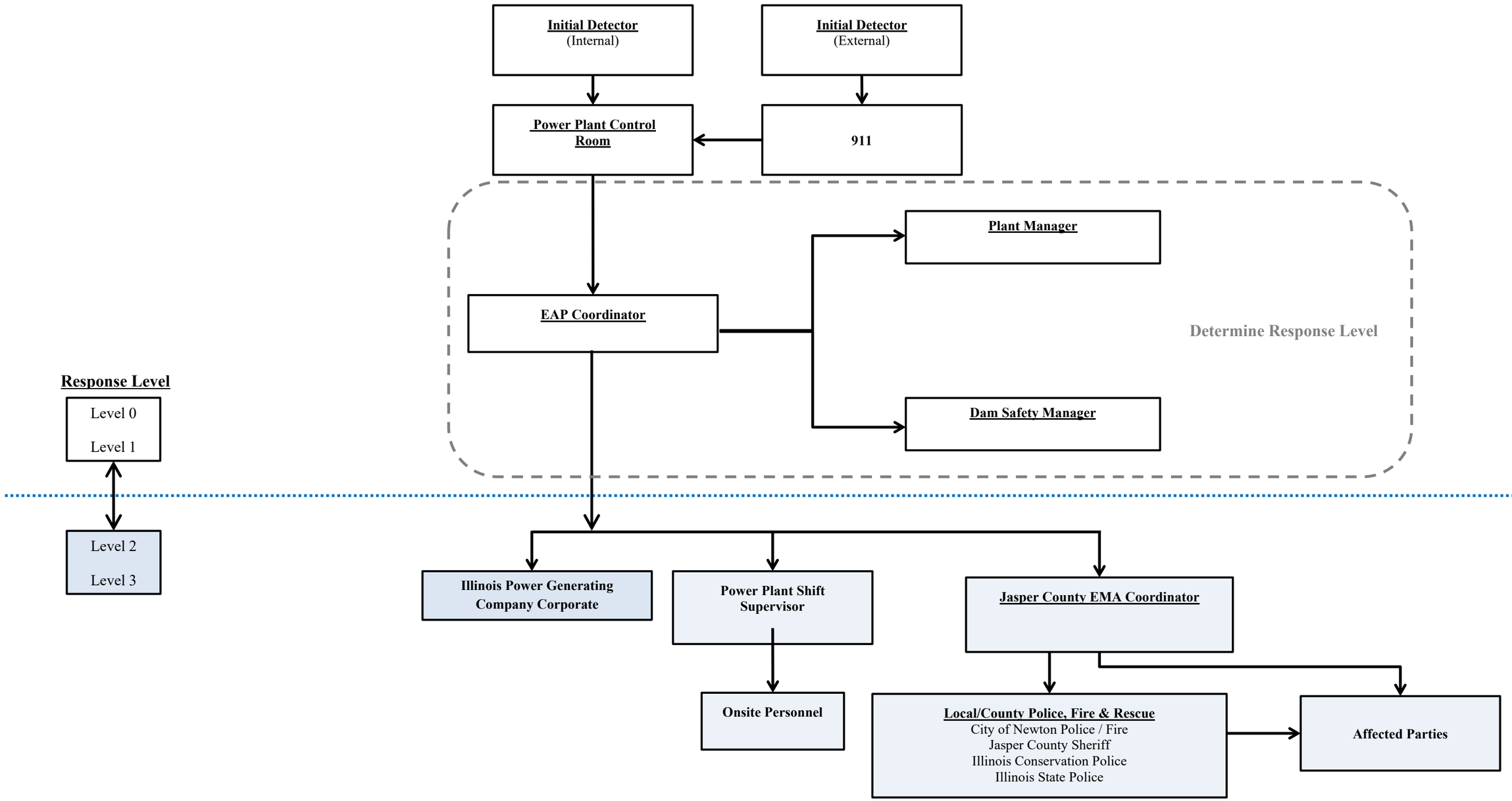


Figure 2-3. EAP Response Process Decision Tree

Note: At any given below, if failure is imminent or actively occurring **CALL 911 IMMEDIATELY** to notify emergency responders and then continue with process afterwards.

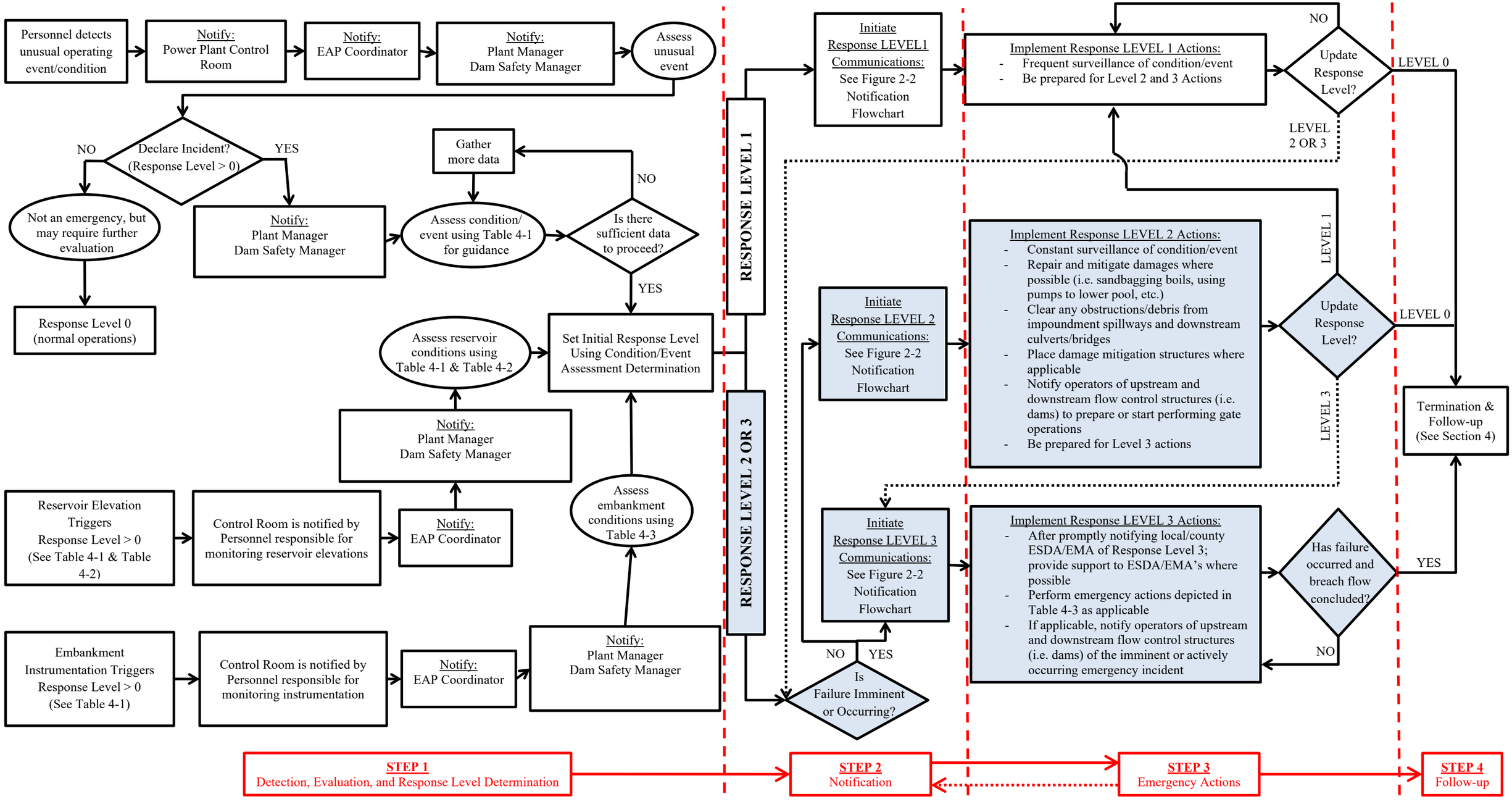


Table 2-1. EAP Emergency Responders

Position	Phone #
Internal Contacts	
Newton Power Plant	
Plant Manager	
EAP Coordinator	(618) 553-4444
Control Room	(618) 783-0501
Corporate Operations	
Dam Safety Manager	(618) 792-8488
External Contacts	
Local / County ESDA/EMA, Police, & Fire	
Jasper County ESDA/EMA	(618) 783-8123, (618) 554-2285
City of Newton Police Dept.	911, (618) 783-4500
City of Newton Fire Dept.	911, (618) 783-3887
Jasper County Sheriff Dept.	911, (618) 783-3057
State Emergency Management Agencies & Organizations	
IDNR-OWR Dam Safety Section Manager	(217) 782-4427
Newton Lake State Fish and Wildlife Area	(618) 783-3478
Illinois Conservation Police	(877) 236-7529
Illinois State Police	911, (618) 542-2171

3 EAP ROLES AND RESPONSIBILITIES

Table 3-1 provides a summary of the EAP roles during an emergency event.

Table 3-1. Summary of EAP Roles

Entity	Role Description
Emergency Response Team (ERT)	**ERT:** personnel responsible for EAP implementation, distribution, updates/maintenance, and training activities. The *ERT* is comprised of the following roles. 1. **Corporate:** corporate entity, committee, team, or position with relevant responsibility for a given generating power plant. 2. **Plant Manager:** Personnel responsible for day-to-day operation and management of the Power Plant. 3. **Dam Safety Manager:** Personnel that is most knowledgeable about the design and technical operation of facilities at a given power plant. 4. **EAP Coordinator:** Personnel responsible for implementing the EAP and associated activities. **Emergency Event – EAP Responsibilities** 1. Respond to emergencies at the Power Plant. 2. Verify and assess emergency conditions. 3. Notify and coordinate as appropriate with participating emergency services disaster agencies or emergency management agencies (ESDA/EMA's), emergency responders, regulatory agencies, and all other entities involved or affected by this EAP. 4. Take corrective action at the Power Plant. 5. Declare termination of emergencies at the Power Plant.
Jasper County ESDA/EMA	1. Receive Response Level reports from *Illinois Power Generating Company Corporate* through *EAP Coordinator*. 2. Coordinate emergency response activities with local authorities: police, fire, and rescue, etc. 3. Coordinate notification of public as necessary through established channels, which may include door-to-door contact. 4. Coordinate notification activities to affected parties within inundation areas. 5. Evaluate risk to areas beyond the inundation areas, communicate needs to the *Illinois Power Generating Company Corporate* and/or *EAP Coordinator*, and coordinate aid as appropriate. 6. Responsible for declaring termination of an emergency condition off-site upon receiving notification of an emergency status termination from the *Illinois Power Generating Company Corporate*. 7. If necessary, coordinate with *State ESDA/EMA*.
City of Newton Police, Fire, and Rescue	1. Receive alert status reports from the *ERT* or the *Jasper County ESDA/EMA*. 2. If necessary, notify affected parties and public within inundation areas (see Section 7). 3. Render assistance to Jasper County ESDA/EMA, as necessary. 4. Render assistance to *Illinois Power Generating Company Corporate and Power Plant Management*, as necessary.
Jasper County Police, Fire and Rescue, and Emergency Services	1. Receive alert status reports from the *ERT* or the *Jasper County ESDA/EMA*. 2. If necessary, notify affected parties within the inundation area. 3. Provide mutual aid to other affected areas, if requested and able.

4 EAP RESPONSE

The 4-Step Incident Response Process is shown in Figure 2-1. The Decision Tree shown in Figure 2-3 provides a flowchart for the various elements of the response process. Upon reaching Step 4 of the response process (termination and follow-up), the EAP Coordinator is responsible for notifying the ESDA/EMA's that the condition of the dam/impoundment has been stabilized. The purpose of this section is to provide specific information that can be used during a response. This information is provided in the following tables:

- Table 4-1 provides guidance for determining the response level.
- Table 4-2 provides impoundment pool level trigger elevations.
- Table 4-3 lists emergency actions to be taken depending on the situation.

Table 4-1. Guidance for Determining the Response Level

Event	Situation	Response Level
Spillway flow (See Table 4-2 for relevant elevations)	Primary spillway flow is not causing active erosion and impoundment water surface elevation is below auxiliary spillway crest elevation (if equipped).	Level 0
	Impoundment water surface elevation is at or above auxiliary spillway crest elevation (if equipped). No active erosion caused by spillway flow.	Level 1
	Spillway flow actively causing minor erosion that is not threatening the control section or dam/impoundment stability.	Level 2
	Spillway flow that could result in flooding of people downstream if the reservoir level continues to rise.	Level 2
	Abnormal operation of the spillway system due to blockage or damage that could lead to flooding.	Level 2
	Spillway flow actively eroding the soil around the spillway that is threatening the control section (e.g., undermining) or dam/impoundment stability.	Level 3
	Spillway flow that is flooding people downstream.	Level 3
Embankment overtopping (See Table 4-2 for relevant elevations)	Impoundment water surface elevation at or below typical normal pool fluctuation elevation.	Level 0
	Impoundment water surface elevation above typical normal pool fluctuation elevation.	Level 1
	Impoundment water surface elevation above high normal pool fluctuation elevation.	Level 2
	Impoundment water surface elevation at or above embankment crest elevation.	Level 3
Seepage	New seepage areas in or near the dam/impoundment with clear flow.	Level 1
	New seepage areas with cloudy discharge or increasing flow rate.	Level 2
	Heavy seepage with active erosion, muddy flow, and/or sand boils.	Level 3
Sinkholes	Observation of new sinkhole in impoundment area or on embankment.	Level 2
	Rapidly enlarging sinkhole and/or whirlpool in the impoundment.	Level 3

Table 4-1. Guidance for Determining the Response Level

Event	Situation	Response Level
Embankment cracking	New cracks in the embankment greater than ¼ inch wide without seepage.	Level 1
	Any crack in the embankment with seepage.	Level 2
	Enlarging cracks with muddy seepage.	Level 3
Embankment movement	Visual signs of movement/slippage of the embankment slope.	Level 1
	Detectable active movement/slippage of the embankment slope or other related effects (tension cracking, bulges/heaves, etc.) that could threaten the integrity of the embankment.	Level 2
	Sudden or rapidly proceeding slides of the embankment slopes.	Level 3
Embankment Monitoring Equipment (piezometers, inclinometers, surface displacement mounts, etc.)	Instrumentation readings beyond historic normal.	Level 1
	Instrumentation readings indicate the embankment is susceptible to failure.	Level 2
	Instrumentation readings indicate embankment is at threshold of failure or is currently failing.	Level 3
Earthquake or another event	Measurable earthquake felt or reported on or within 100 miles of the impoundment.	Level 1
	Earthquake or other event resulting in visible damage to the impoundment or appurtenances.	Level 2
	Earthquake or other event resulting in uncontrolled release of water or materials from the impoundment.	Level 3
Security threat	Verified bomb threat or other physical threat that, if carried out, could result in damage to the impoundment.	Level 2
	Detonated bomb or other physical damage that has resulted in damage to the impoundment or appurtenances.	Level 3
Sabotage/ vandalism	Damage to impoundment or appurtenance with no impact to the functioning of the impoundment.	Level 1
	Modification to the impoundment or appurtenances that could adversely impact the functioning of the impoundment. This would include unauthorized operation of spillway facilities.	Level 2
	Damage to impoundment or appurtenances that has resulted in seepage flow.	Level 2
	Damage to impoundment or appurtenances that has resulted in uncontrolled water release.	Level 3

Table 4-2. Impoundment Trigger Elevations

Impoundment	Embankment Crest Elevation	Auxiliary Spillway Crest Elevation	Normal Pool Fluctuation	
			Typical	High
Primary Ash Pond	554.0 feet	Not Applicable	534.0 ft.	537.0 ft.

Table 4-3. Step 3: Emergency Actions

Condition	Description of Condition	Action to be Taken
High Water Level/ Large Spillway Release	See Table 4-1 and Table 4-2 for elevations and triggering water levels associated with the impoundment and spillways covered by this EAP.	1. Assess cause of increased reservoir stage, especially during fair weather conditions. 2. Determine Response Level. 3. Make proper notifications as outlined in the Figure 2-2 Notification Flowchart. 4. Perform additional tasks as determined through consultation with the ERT. 5. Make notifications if condition worsens such that downstream flooding is imminent. **Response Level 0**: require enhanced surveillance 3 times per day **Response Level 1**: contact internal chain of command and external response partners as necessary; inspect impoundment minimum 1 time per hour **Response Level 2**: contact internal chain of command; notify ESDA/EMA's and notify external response partners. ESDA/EMA's notify affected parties. **Response Level 3**: contact internal chain of command; notify ESDA/EMA's and notify external response partners. ESDA/EMA's notify affected parties of emergency incident.
Seepage	Localized new seepage or boil(s) observed along downstream face / toe of earthen embankment with muddy discharge and increasing but controllable discharge of water.	1. Measure and record feature dimensions, approximate flow rate, and relative location to existing surface features. Take photos. Document location on a site plan and in inspection notes. 2. Determine Response Level. 3. Make proper notifications as outlined in the Figure 2-2 Notification Flowchart. 4. ERT (with Dam Safety Manager as lead) to determine mitigation actions. The following actions may apply: a) Place a ring of sandbags with a weir at the top towards the natural drainage path to monitor flow rate. If boil becomes too large to sandbag, place a blanket filter over the area using non-woven filter fabric and pea gravel. Attempt to contain flow in such a manner (without performing any excavations) that flow rates can be measured. Stockpile gravel and sand fill for later use, if necessary. b) Inspect the embankment and collect piezometer, water level and seepage flow data daily unless otherwise instructed by the Dam Safety Manager. Record any changes of conditions. Carefully observe embankment for signs of depressions, seepage, sinkholes, cracking or movement. c) Maintain continuous monitoring of feature. Record measured flow rate and any changes of condition, including presence or absence of muddy discharge.

Table 4-3. Step 3: Emergency Actions

Condition	Description of Condition	Action to be Taken
		5. Make notifications as outlined in the lower portion of the Notification Flowchart (Figure 2-2) if condition worsens such that failure is imminent.
Sabotage and Miscellaneous Other Issues	Criminal action with significant damage to embankment or structures where significant repairs are required and the integrity of the facility is compromised—condition appears stable with time.	1. Contact law enforcement authorities and restrict all access (except emergency responders) to impoundment. Restrict traffic on embankment crest to essential emergency operations only. 2. Determine Response Level. 3. Make internal notifications as outlined in the upper portion of the Notification Flowchart (Figure 2-2). 4. In conjunction with the Dam Safety Manager, assess extent of damage and visually inspect entire embankment and ancillary structures for additional less obvious damage. Based on inspection results, confirm if extent of damage to various components of the impoundment warrants a revised Response Level and additional notifications. 5. Perform additional tasks as directed by the ERT. 6. Make notifications if conditions worsen.
Embankment Deformation	**Cracks:** New longitudinal (along the embankment) or transverse (across the embankment) cracks more than 6 inches deep or more than 3 inches wide or increasing with time. New concave cracks on or near the embankment crest associated with slope movement.	1. Measure and record feature dimensions, approximate flow rate, and relative location to existing surface features. Take photos. Document location on a site plan and in inspection notes. 2. Restrict traffic on embankment crest to essential emergency operations only. 3. Determine Response Level. 4. Make notifications as outlined in the Figure 2-2 Notification Flowchart. 5. ERT (with Dam Safety Manager as lead) to determine mitigation actions. The following actions may apply: a) Place buttress fill against base of slope immediately below surface feature. Stockpile additional fill. b) Place sandbags as necessary around crack area to divert any storm water runoff from flowing into crack(s). 6. As directed by the Dam Safety Manager, additional inspection and monitoring of the dam may be required. Items may include inspect the dam on a schedule determined by the Dam Safety Manager; collect piezometer and water level data; and record any changes of condition. Carefully observe dam for signs of depressions, seepage, sinkholes, cracking or movement. 7. Make notifications as outlined in the Figure 2-2 Notification Flowchart if conditions worsen such that failure is imminent.
Embankment Deformation (cont.)	**Slides / Erosion:** Deep slide / erosion (greater than 2 feet deep) on the embankment that may also extend beyond the embankment toe but does not encroach onto the embankment crest and appears stable with time.	1. Measure and record feature dimensions, approximate flow rate, and relative location to existing surface features. Take photos. Document location on a site plan and in inspection report. 2. Restrict traffic on embankment crest to essential emergency operations only. 3. Determine the Response Level. 4. Make notifications as outlined in the Figure 2-2 Notification Flowchart. 5. ERT (with Dam Safety Manager as lead) to determine mitigation actions. Additional actions may include the following items. a) Place sandbags as necessary around slide area to divert any storm water runoff from flowing into slide(s). b) Increase inspections of the dam; collect piezometer and water level data; and record any changes of condition. During inspections, carefully observe dam for signs of depressions, seepage, sinkholes, cracking or movement.

Table 4-3. Step 3: Emergency Actions

Condition	Description of Condition	Action to be Taken
		6. Make notifications as outlined in the Figure 2-2 Notification Flowchart if conditions worsen such that failure is imminent.
	Sinkholes: Small depression observed on the embankment or within 50 feet of the embankment toe that is less than 5 feet deep and 30 feet wide or which is increasing with time.	1. Slowly open drain gates to lower pool elevation. 2. Measure and record feature dimensions, approximate flow rate, and relative location to existing surface features. Take photos. Document location on a site plan and in inspection notes. 3. Restrict traffic on embankment crest to essential emergency operations only. 4. Determine Response Level. 5. Make notifications as outlined in the Figure 2-2 Notification Flowchart. 6. ERT (with Dam Safety Manager as lead) to determine mitigation actions. Additional actions may include the following items: a) Backfill the depression with relatively clean earth fill (free of organic materials) generally even with surrounding grade and slightly mounded (6 to 12 inches higher) in the center to shed storm water away from the depression. Stockpile additional fill. b) Increase inspections of the dam; collect piezometer and water level data daily unless otherwise instructed by Dam Safety Manager; and record any changes of condition. Carefully observe dam for signs of depressions, seepage, sinkholes, cracking or movement. 7. Make notifications as outlined in the Figure 2-2 Notification Flowchart if conditions worsen such that failure is imminent.
Gate Malfunction or Failure	Sluice gate damaged structurally (sabotage, debris, etc.) with uncontrolled release of water at a constant volume. Condition appears stable.	1. Close any other gates, if open. 2. Determine Response Level. 3. Make notifications as outlined in the Figure 2-2 Notification Flowchart. 4. Obtain instructions from the Dam Safety Manager to determine if there are other methods to stop or slow down the flow of water. 5. If conditions worsen such that failure is imminent, make notifications as outlined in the lower portion of the Figure 2-2 Notification Flowchart.

5 PREPAREDNESS

The intent of this section is to provide information that will be utilized during a response. Established emergency supplies and locations, suppliers, and equipment are provided in Table 5-1. Suppliers contact information is listed in Table 5-2.

A coordination meeting shall be conducted annually between representatives of the Illinois Power Generating Company and local emergency responders. This meeting may be in the form of a face-to-face meeting, tabletop exercise, or additional training regarding the EAP.

Table 5-1. Emergency Supplies and Equipment

Item	On-site (Yes/No/Occasionally)	Remarks
Flashlights	Yes	Contact Shift Supervisor(s) for location and availability.
Generator	Yes	Contact Shift Supervisor(s) for location and availability.
Extension Cords	Yes	Contact Shift Supervisor(s) for location and availability.
Fire extinguishers	Yes	Contact Shift Supervisor(s) for location and availability.
Floodlights	Yes	Contact Shift Supervisor(s) for location and availability.
Backhoe		Contact Shift Supervisor(s) for location and availability.
Dozer	Yes	CAT D10R + CAT D9R
Large Equipment (Rental – including excavating equipment, pumps, lighting)		Contact Shift Supervisor(s) for location and availability.
Grader	Yes	CAT 14H
Track Hoe Excavator	Yes	CAT 330L
Scraper	Yes	637D Coal Scraper
Dump Truck	Yes	CAT 730 (30 Ton)
Pump and Hoses	Yes	Contact Shift Supervisor(s) for location and availability.
Sandbags and Sand		Contact Shift Supervisor(s) for location and availability.
Fill (Stone, aggregate, sand)	Yes	Contact Shift Supervisor(s) for location and availability.
Concrete/grout	No	Contact Shift Supervisor(s) for location and availability.
Geotextile Filter Fabric	Yes	2 rolls of 10-ounce, non-woven filter fabric (stock #4906798)
Plastic Sheeting		Contact Shift Supervisor(s) for location and availability.
Rope	Yes	Contact Shift Supervisor(s) for location and availability.
Personal Flotation Devices	Yes	Contact Shift Supervisor(s) for location and availability.

Table 5-2. Supplier Addresses

Supply / Rental Item(s)	Supplier Contact Information	Distance from Site (miles)	Address
Sandbags	NYP Corp.	125	1416 North Broadway, St. Louis, MO. 63102 800-331-2445 800-524-1052 (emergency)
Gravel, Sand, & Riprap	C & H Gravel	27	1682 Co. Rd. 1050 N., Greenup, IL 62428 (217) 849-2323
	Lawrence Gravel Inc.	41	Palestine, IL 62451 (618) 586-5433
Cement, Sand, Grout	Newton Ready-Mix Division	11	8560 IL-360, Newton, IL 62448 (618) 783-8611
Portable Pumps, Rental Equipment	Jensen Equipment Company	19	Newton, Illinois (888) 826-2048
	JJet Rental-Sales & Service	39	905 IL-49, Casey, IL 62420 (217) 932-9033
	RWCI Equipment Sales, Rentals & Services	32	10 Industrial Park, Flora, IL 62839 (618) 662-8941
	Senco Construction Inc.	36	1408 S. Eaton St., Robinson, IL 62454 (618) 546-1485
	Bahrns Equipment	23	1708 S. Banker St., Effingham, IL 62401 (217) 342-2909
Large Capacity Portable Pumps	Xylem / Godwin Pumps Mine Supply Co.	87	1703 Shawnee St., Mt. Vernon, IL 62864 (618) 242-2087
	Water Movers Equipment Rental	125	1800 S. 3rd Street, St. Louis, MO 63104 (636) 717-2220
General Hardware & Supply	Kirchner Building Center	11	401 E. Decatur St., Newton, IL 62448 (618) 783-2388
	Hurn Lumber Company	30	200 W. Butler St., Olney, IL 62450 (618) 395-8576

6 FACILITY / IMPOUNDMENT DESCRIPTION

The impoundment included in this EAP is described as follows and illustrated in Figure 1-2. Table 6-1 contains additional geometric details for the impoundment.

The Newton Power Plant is located on the west bank of Newton Lake in South Muddy Township, Jasper County, Illinois. The Power Plant is located approximately eight miles southwest of the Town of Newton, Illinois.

Primary Ash Pond: A diked earthen impoundment that extends over an area of approximately 400 acres. The crest of the impoundment is about 15 foot wide at an approximate elevation of 555.0 feet with an average adjacent ground elevation outside of the impoundment of about 530.0 feet. The pond has an operating pool about 268.8 acres in size, which currently has a water surface elevation of about 533.5 feet (the interior base of the pond is partially incised). The Primary Ash Pond discharges to the southwest through a concrete control structure to the Secondary Pond.

Table 6-1. Power Plant Impoundment Characteristics

Feature/Parameter	Primary Ash Pond
Maximum Embankment Height	42 feet
Length of Dam	16,600 feet
Crest Width	15 feet
Crest Elevation	554.0 feet
Reservoir Area at Top of Dam	400 acres
Storage Capacity at Top of Dam	9250 acre-feet
Primary Spillway Type	30-inch Coated CMP w/ Concrete Weir Box w/ Stop Logs
Primary Spillway Crest Elevation	533.5 feet
Storage Capacity at Primary Spillway Elevation	1753 acre-feet
Reservoir Area at Normal Water Surface Elevation	162.0 acres
Auxiliary Spillway Type	Secondary Weir Structure
Auxiliary Spillway Crest Elevation	536.0 feet

7 BREACH INUNDATION MAP AND POTENTIAL IMPACTS

An inundation map for a potential breach scenario of the Primary Ash Pond is provided as Figure 7-1. It is the Jasper County ESDA/EMA's responsibility to keep a current list of affected parties/properties to contact in the case of emergencies that result in Response Level 2 or 3. This list should encompass all properties within and adjacent to the probable inundation extents shown in the provided map.

The methodology used to identify probable inundation extents for potential breach scenarios varied as a function of the impoundment size, location, surrounding topography, and surrounding structures/facilities/waterbodies.

The methodology used to identify probable inundation extents for the Primary Ash Pond consisted of a visual assessment performed by comparing pond and embankment elevations to surrounding topography using LIDAR elevation data obtained from the Illinois Height Modernization Program. Additionally, an approximate volumetric comparison was evaluated to determine a potential breach of the Primary Ash Pond would not result in an immediate and significant rise in water surface elevations on Newton Lake.

The approximate inundation area is illustrated in Figure 7-1.

Legend

- CCR Surface Impoundment Boundary
- Expected Breach Inundation Area

0 0.5 1 Miles

1:31,680 (1" = 0.5 miles at original document size of 11x17)

Stantec DYNEGY

Project Location	175666013
Latitude: 38.936621	Prepared by EC on 2017-03-08
Longitude: -88.277038	Technical Review by TS on 2017-03-27
Jasper County, Illinois	Independent Review by MM on 2017-03-20

Client/Project
Newton Power Station
Emergency Action Plan

Figure No.
7-1

Title
Inundation Map
Primary Ash Pond

Notes
1. Coordinate System: WGS 1984 Web Mercator Auxiliary Sphere
2. Basemap Source: Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community
3. Impoundment Boundaries Provided by Client (Dated 9/9/2015)

St. Louis 175666013\...\Appendix B.mxd