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Finding of No Significant
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Mitigation – Hamilton County,
TN
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**ENERGYRIGHT SOLUTIONS USEPA MITIGATION
PROJECT PROPOSAL FOR ERLANGER WASTE HEAT
RECOVERY AND COMBINED HEAT AND POWER
PROJECT
ENVIRONMENTAL ASSESSMENT AND
FINDING OF NO SIGNIFICANT IMPACT
Hamilton County, Tennessee**

Prepared by:
TENNESSEE VALLEY AUTHORITY
Knoxville, Tennessee

March 2017

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Proposed Action

The Tennessee Valley Authority (TVA) proposes to provide a grant to Erlanger Health Systems for the development of a 5 megawatt (MW) Industrial Waste Heat Recovery (WHR) and Combined Heat and Power (CHP) project located in Hamilton County, Tennessee. TVA funding may be used for the interior demolition of the Erlanger incinerator building (Attachment A) and replacing the incinerator with a WHR/CHP plant system, which is based on a reciprocating internal combustion engine (RICE) and a heat recovery steam generator (HRSG). This project is intended to utilize waste heat conversion technologies to recover existing waste heat from an industrial process and convert it to approximately 5 MW of clean electricity. The new system would allow Erlanger Health Systems to improve the heating and powering of its hospital.

The proposed new WHR/CHP plant would require the installation of new exhaust stack(s) that would penetrate the roof and large air louvers on the outside walls. The proposed construction would also include the installation of new equipment and condensers that would be located on a concrete pad adjacent to the incinerator building.

The entire Erlanger Health Systems campus is served by a Central Energy Plant, which is the single point of entry for power and gas, producing low voltage power for the campus. The Central Energy Plant is located approximately 250 feet from the incinerator building. The proposed construction would require the construction and installation of connecting infrastructure (water and gas lines) from the existing Central Energy Plant building to the new WHR/CHP (Figure 1). This infrastructure would be installed above-ground via pipe-bridges. Therefore, no ground disturbance is needed for the proposed project. An existing paved lot would be used for the laydown area.

Purpose and Need for Action

In April of 2011, TVA's board of directors approved clean air agreements with the Environmental Protection Agency (USEPA), four states and three environmental groups. The agreements require implementation of 11 mitigation projects that support TVA's vision for low-cost and cleaner energy. TVA is obligated to spend no less than \$288 million on these mitigation projects as well as provide \$60 million to the states of Alabama, Kentucky, North Carolina, and Tennessee for state environmental mitigation projects. The grant provided by TVA to Erlanger Systems would assist in project design for the construction and operation of the WHR/CHP project, which would constitute a mitigation project under the clean air agreements.

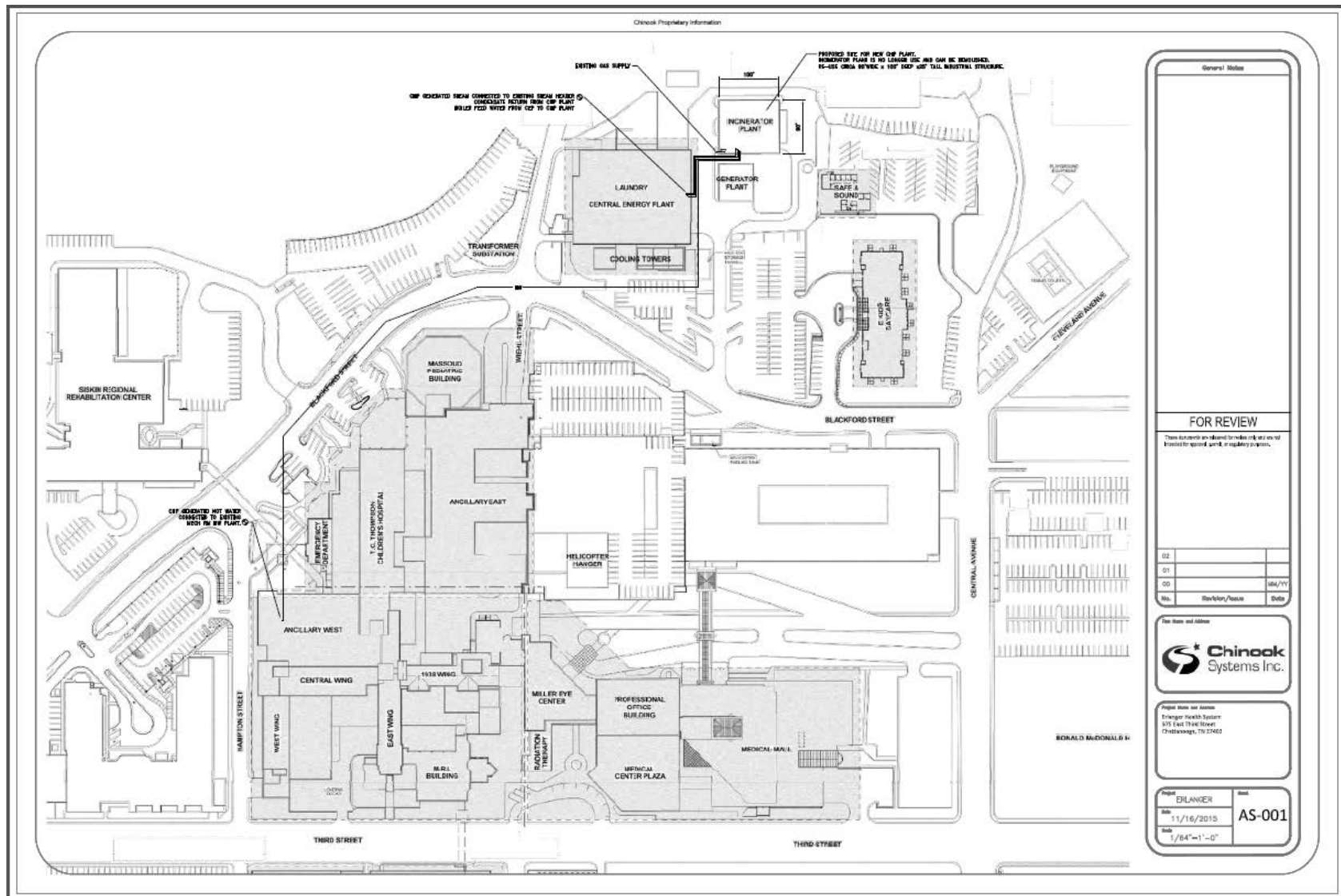


Figure 1: Proposed Design Plans

Decision to be Made

The decision before TVA is whether to provide funding to Erlanger Health Systems for the development of a 5 MW Industrial WHR/CHP project, which would constitute a mitigation project under the clean air agreements.

Environmental Impacts

TVA has reviewed the proposed project and documented potential environmental impacts related to the project in the attached categorical exclusion checklist (Checklist) (Attachment B). The Checklist identifies the resources present in the project area and documents TVA's determination that the proposal would not significantly affect these resources.

The proposed WHR/CHP plant construction and laydown area would occur at a previously developed site and no water bodies are located near the project area. Therefore, no impacts to aquatic resources, terrestrial ecology (wildlife and vegetation), threatened and endangered species, prime farmland, and wetlands are anticipated under the proposed action. The proposed project would not involve activity within the 100-year floodplain, which would be consistent with Executive Order 11988 (Protection of Floodplains). There would be minor potential impacts on water quality, socioeconomic and environmental justice, waste, and transportation by implementation of the proposed action.

The proposed construction and installation of the WHR/CHP plant would require modifications to the incinerator building (circa 1987). Since the incinerator building is less than 50 years and lacks any unique historic features, it is not eligible for the National Register of Historic Places. All the proposed infrastructure (piping) would be installed via pipe bridge and would require no ground disturbance. As such, this type of activity has no potential to affect historic properties.

All construction and demolition debris would be managed according all local, state, and federal requirements. A 10-day asbestos removal and demolition notification would be required prior to demolition of the inside of the incinerator building.

As documented in the Checklist, the proposed action could potentially impact air quality, climate change, and noise. Impacts to these resources were evaluated in further detail. The results of those additional analyses, and TVA's determination that the proposed action would not significantly affect these resources, are summarized in this Environmental Assessment and Finding of No Significant Impact.

Air Quality

Through its passage of the Clean Air Act (CAA), Congress has mandated the protection and enhancement of our nation's air quality resources. National Ambient Air Quality Standards (NAAQS; USEPA 2015) for the following criteria pollutants have been set to protect the public health and welfare:

- sulfur dioxide (SO₂),
- ozone (O₃),
- nitrogen dioxide (NO₂),
- particulate matter whose particles are ≤ 10 micrometers (PM₁₀),
- particulate matter whose particles are ≤ 2.5 micrometers (PM_{2.5}),
- carbon monoxide (CO), and
- lead (Pb).

The primary NAAQS were promulgated to protect the public health, and the secondary NAAQS were promulgated to protect the public welfare from any known or anticipated adverse effects

associated with the presence of pollutants in the ambient air (e.g., visibility, crops, forests, soils and materials). A listing of the NAAQS is presented in Table 1.

Ambient air monitors measure concentrations of these pollutants to determine attainment with these standards. Areas in violation of the NAAQS are designated as nonattainment areas and must develop plans to improve air quality and achieve the NAAQS. New sources of air pollution in or near these areas may be subject to more stringent air permitting requirements.

Hamilton County, Tennessee is currently in attainment with the NAAQS for CO, NO₂, PM₁₀ particulate matter, Pb, O₃, and SO₂ (USEPA 2017a). The County was in non-attainment for PM_{2.5} particulate matter; however, it was redesignated for maintenance in November 2015. Ambient air concentrations measured in Hamilton County for the three year period from 2013 to 2015 are below the level of the NAAQS, indicating air quality is good (USEPA 2016).

Table 1. National Ambient Air Quality Standards

Pollutant	Primary / Secondary	Averaging Time	Level	Form
Carbon Monoxide (CO)	primary	8 hours	9 ppm	Not to be exceeded more than once per year
		1 hour	35 ppm	
Lead (Pb)	primary and secondary	Rolling 3 month average	0.15 µg/m ³ [1]	Not to be exceeded
Nitrogen Dioxide (NO ₂)	primary	1 hour	100 ppb	98th percentile of 1-hour daily maximum concentrations, averaged over 3 years
	primary and secondary	Annual	53 ppb [2]	Annual Mean
Ozone (O ₃)	primary and secondary	8 hours	0.070 ppm [3]	Annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years
Particulate Matter (PM _{2.5})	primary	Annual	12.0 µg/m ³	annual mean, averaged over 3 years
	secondary	Annual	15.0 µg/m ³	annual mean, averaged over 3 years
	primary and secondary	24-hours	35 µg/m ³	98th percentile, averaged over 3 years
Particulate Matter (PM ₁₀)	primary and secondary	24-hours	150 µg/m ³	Not to be exceeded more than once per year on average over 3 years
Sulfur Dioxide (SO ₂)	primary	1-hour	75 ppb [4]	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years
	secondary	3-hours	0.5 ppm	Not to be exceeded more than once per year

Source: USEPA 2015

Notes:

- 1 In areas designated nonattainment for the Pb standards prior to the promulgation of the current (2008) standards, and for which implementation plans to attain or maintain the current (2008) standards have not been submitted and approved, the previous standards (1.5 µg/m³ as a calendar quarter average) also remain in effect.
- 2 The level of the annual NO₂ standard is 0.053 ppm. It is shown here in terms of ppb for the purposes of clearer comparison to the 1-hour standard level.
- 3 Final rule signed October 1, 2015, and effective December 28, 2015. The previous (2008) O₃ standards additionally remain in effect in some areas. Revocation of the previous (2008) O₃ standards and transitioning to the current (2015) standards will be addressed in the implementation rule for the current standards.

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- 4 The previous SO₂ standards (0.14 ppm 24-hour and 0.03 ppm annual) will additionally remain in effect in certain areas: (1) any area for which it is not yet 1 year since the effective date of designation under the current (2010) standards, and (2) any area for which implementation plans providing for attainment of the current (2010) standard have not been submitted and approved and which is designated nonattainment under the previous SO₂ standards or is not meeting the requirements of a SIP call under the previous SO₂ standards (40 CFR 50.4(3)). A SIP call is an USEPA action requiring a state to resubmit all or part of its State Implementation Plan to demonstrate attainment of the required NAAQS.

There would be transient air pollutant emissions during the construction of the proposed WHR/CHP system. Air quality impacts from construction activities would be temporary and dependent on both man-made factors (e.g., intensity of activity, control measures) and natural factors (e.g., wind speed, wind direction, soil moisture). Even under unusually adverse conditions, these emissions would have, at most, minor, temporary on- and off-site air quality impacts and would not cause exceedance of the applicable NAAQS.

The proposed WHR/CHP system is approximately 80 percent more efficient than a non CHP power system (i.e., the existing incinerator system). The WHR/CHP system requires less fuel to produce the same energy output, which increases energy efficiency, reduces air emissions and reduces electricity demand on the power grid (USEPA 2017b). The proposed project would displace 43,260 MWh of grid supplied power. This displacement would greatly reduce Erlanger Health System's net Carbon Dioxide (CO₂), SO₂, and NO_x equivalent emissions (see Table 2 below). The system would also reduce PM emissions since it is more energy efficient than the current energy system. By replacing the aging incinerator plant, this project would also reduce hazardous air pollutants such as benzene, mercury, and asbestos. The overall reduction in air emissions would be beneficial to the project area. The proposed system would help Hamilton County to stay in attainment for all NAAQS pollutants.

Table 2. Proposed WHR/CHP System Estimated Emission Output¹

NAAQS Pollutant	Grid Power ² tons per year (tons/yr)	CHP Engines (tons/yr)	Boilers (tons/yr)	Net Change (tons/yr)
CO ₂	-22,200	+21,100	-9,250	-10,350
SO ₂	-39.5	+0	+0	-39.5
NO _x	-14.06	+7.35	-10.28	-17

¹ Source: Erlanger Health Systems 2015

² The emissions associated with the displacement of 43,260 MWh of grid supplied power. The onsite energy system will transition to a 5MW plant that would fuel onsite activities without sending excess energy produced back to the grid.

The applicant would be required to obtain an air permit from Hamilton County Air Pollution Control Bureau or amend its current permit before construction begins. This air permit would ensure the proposed project follows state and federal regulations. This permit program would help ensure that potential impacts on air quality are insignificant. By following the conditions in the air permit, there would be no additional impacts to air quality as a result of the proposed project.

Climate Change and Greenhouse Gases

Climate change refers to any substantive change in measures of climate, such as temperature, precipitation, or wind. It is thought that certain substances present in the atmosphere act like the glass in a greenhouse to retain a portion of the heat that is radiated from the surface of the earth. The primary greenhouse gas (GHG) emitted by human activity is CO₂ produced by the combustion of coal and other fossil fuels. Coal- and gas-fired electric power plants and automobiles are major sources of CO₂ emissions in the U.S. Other important sources include gas combustion used for heating buildings. Forests and other vegetated landforms represent sinks of CO₂. GHG emissions are also affected by development activities associated with land or forest clearing and land use changes; construction activities involving use of fossil-fuel powered equipment; change in traffic flow; or incorporation of parks or recreational areas. In 2014, Tennessee's energy related CO₂ emissions were 100 million metric tons (U.S. Energy Information Administration 2017).

The proposed WHR/CHP system would decrease the current GHG emissions produced by Erlanger. As shown in Table 2, the proposed system would decrease Erlanger's CO₂ (primary GHG) net emissions by 10,350 tons/year. The proposed project would reduce Tennessee's energy related CO₂ emissions by approximately 0.01 percent. The proposed project would have minor beneficial impact on GHG emissions.

Noise

The proposed WHR/CHP plant construction would generate some temporary, short-term noise. The noise of the new WHR/CHP plant would be less than the old incinerator. The old incinerator created approximately 90-100 A-weight decibels (dBA) of noise and the CHP engines would operate at 65-70 dBA. Noise from the radiator equipment associated with the CHP plant is expected to be more than 70 but less than 90 dBA. The radiators run occasionally rather than continuously. The equipment would be furnished with noise certificates by the manufacturers. The cooling towers near the site, that are louder than the CHP equipment, would remain in use. Therefore, there would likely be negligible beneficial noise impact as the new energy system would reduce noise of the energy system on the project site.

Mitigation Measures

A 10-day asbestos removal and demolition notification would be required prior to demolishing the interior of the incinerator building. Erlanger Health Systems would be required to obtain appropriate air and demolition permits and provide applicable demolition notifications prior to start of construction. No non-routine mitigation measures were identified during the environmental review process.

Conclusion and Findings

Based on the findings listed above and the analyses in the attached checklist, we conclude that the proposed action to provide funding to Erlanger Health Systems for the development of a 5 MW Industrial WHR/CHP project would not be a major federal action significantly affecting the environment. Accordingly, an environmental impact statement is not required.



March 16, 2017

Amy B. Henry, Manager
NEPA Program and Valley Projects
Tennessee Valley Authority

Date Signed

Preparers

NEPA Project Management

Dana M. Vaughn, Environmental Program Manager – Document Preparation

Loretta A. McNamee, Contract NEPA Specialist – NEPA Compliance and Document Preparation

Other Contributors

Michaelyn S. Harle, Archaeologist – Cultural Resources, National Historic Preservation Act Compliance

Carrie C. Williamson, P.E., CFM, Civil Engineer – Floodplains

References

Erlanger Health System. 2015. Industrial Waste Heat Recovery & Combined Heat and Power Project Proposal. Erlanger Health System. Provided by Chinook Systems, Inc. and Balfour Beatty. December 7, 2015.

United States Energy Information Administration. 2017. Energy-Related Carbon Dioxide Emissions at the State Level, 2000-2014. January 17, 2017. Available at <http://www.eia.gov/environment/emissions/state/analysis/>. Accessed February 28, 2017.

United States Environmental Protection Agency (USEPA). 2015. National Ambient Air Quality Standards. Available at <https://www.epa.gov/criteria-air-pollutants/naaqs-table>. Accessed February 27, 2017.

_____. 2016. Air Quality Statistics Report. Available at <https://www.epa.gov/outdoor-air-quality-data/air-quality-statistics-report>. Accessed February 28, 2017.

_____. 2017a. Green Book – Tennessee Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants. As of February 13, 2017. Available at https://www3.epa.gov/airquality/greenbook/anayo_tn.html. Accessed February 27, 2017.

_____. 2017b. Combined Heat and Power (CHP) Partnership – CHP Benefits. Available at <https://www.epa.gov/chp/chp-benefits>. Accessed February 28, 2017.

Attachments

Attachment A – Site Photographs

Attachment B - Categorical Exclusion Checklist for Proposed TVA Actions – EnergyRight Solutions

Attachment A – Site Photographs



Figure 1. Existing Erlanger Health Systems Incinerator Building



Figure 2. Existing Erlanger Health Systems Incinerator Building



Figure 3. Existing Erlanger Health Systems Incinerator Building

Attachment B – Categorical Exclusion Checklist 36258

Categorical Exclusion Checklist for Proposed TVA Actions

Categorical Exclusion Number Claimed	Organization ID Number	Tracking Number (NEPA Administration Use Only) 36258
Form Preparer Dana M Vaughn	Project Initiator/Manager Dana M Vaughn	Business Unit External Rel - Energyright & Renewable Solutions
Project Title EnergyRight Solutions EPA Mitigation Grant Erlanger Health Systems WHR/CHP Project		Hydrologic Unit Code
Description of Proposed Action (Include Anticipated Dates of Implementation) For Proposed Action See Attachments and References		<input type="checkbox"/> Continued on Page 3 (if more than one line)
Initiating TVA Facility or Office		TVA Business Units Involved in Project External Rel - Energyright & Renewable Solutions
Location (City, County, State) Hamilton, TN, Erlanger Health Systems 975 E 3rd St, Chattanooga, TN 37403		

Parts 1 through 4 verify that there are no extraordinary circumstances associated with this action:

Part 1. Project Characteristics

Is there evidence that the proposed action...	No	Yes	Commitment	Information Source for Insignificance
1. Is major in scope?	X			Vaughn, Dana M. 02/15/2017
2. Is part of a larger project proposal involving other TVA actions or other federal agencies?		X		For comments see attachments
* 3. Involves non-routine mitigation to avoid adverse impacts?	X		No	Vaughn, Dana M. 02/15/2017
4. Is opposed by another federal, state, or local government agency?	X			Vaughn, Dana M. 02/15/2017
* 5. Has environmental effects which are controversial?	X			Vaughn, Dana M. 02/15/2017
* 6. Is one of many actions that will affect the same resources?	X			Vaughn, Dana M. 02/15/2017
7. Involves more than minor amount of land?	X			Vaughn, Dana M. 02/15/2017

*If "yes" is marked for any of the above boxes, consult with NEPA Administration on the suitability of this project for a categorical exclusion.

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Part 2. Natural and Cultural Features Affected

Would the proposed action...	No	Yes	Permit	Commitment	Information Source for Insignificance
1.Potentially affect endangered, threatened, or special status species?	X		No	No	For comments see attachments
2.Potentially affect historic structures, historic sites, Native American religious or cultural properties, or archaeological sites?	X		No	No	For comments see attachments
3.Potentially take prime or unique farmland out of production?	X		No	No	For comments see attachments
4.Potentially affect Wild and Scenic Rivers or their tributaries?	X		No	No	Vaughn, Dana M. 02/15/2017
5.Potentially affect a stream on the Nationwide Rivers Inventory?	X		No	No	Vaughn, Dana M. 02/15/2017
6.Potentially affect wetlands?	X		No	No	For comments see attachments
7.Potentially affect water flow, stream banks or stream channels?	X		No	No	Vaughn, Dana M. 02/15/2017
8.Potentially affect the 100-year floodplain?	X		No	No	For comments see attachments
9.Potentially affect ecologically critical areas, federal, state, or local park lands, national or state forests, wilderness areas, scenic areas, wildlife management areas, recreational areas, greenways, or trails?	X		No	No	Vaughn, Dana M. 02/15/2017
10.Contribute to the spread of exotic or invasive species?	X		No	No	Vaughn, Dana M. 02/15/2017
11.Potentially affect migratory bird populations?	X		No	No	Vaughn, Dana M. 02/15/2017
12.Involve water withdrawal of a magnitude that may affect aquatic life or involve interbasin transfer of water?	X		No	No	For comments see attachments
13.Potentially affect surface water?	X		No	No	For comments see attachments
14.Potentially affect drinking water supply?	X		No	No	Vaughn, Dana M. 02/15/2017
15.Potentially affect groundwater?	X		No	No	Vaughn, Dana M. 02/15/2017
16.Potentially affect unique or important terrestrial habitat?	X		No	No	Vaughn, Dana M. 02/15/2017
17.Potentially affect unique or important aquatic habitat?	X		No	No	Vaughn, Dana M. 02/15/2017

Part 3. Potential Pollutant Generation

Would the proposed action potentially (including accidental or unplanned)...	No	Yes	Permit	Commitment	Information Source for Insignificance
1.Release air pollutants?		X	Yes	No	For comments see attachments
2.Generate water pollutants?	X		No	No	Vaughn, Dana M. 02/17/2017
3.Generate wastewater streams?	X		No	No	Vaughn, Dana M. 02/17/2017
4.Cause soil erosion?	X		No	No	For comments see attachments
5.Discharge dredged or fill materials?	X		No	No	Vaughn, Dana M. 02/17/2017
6.Generate large amounts of solid waste or waste not ordinarily generated?	X		No	No	For comments see attachments
7.Generate or release hazardous waste (RCRA)?	X		No	No	Vaughn, Dana M. 02/17/2017
8.Generate or release universal or special waste, or used oil?		X	No	No	For comments see attachments
9.Generate or release toxic substances (CERCLA, TSCA)?	X		No	No	Vaughn, Dana M. 02/17/2017
10.Involve materials such as PCBs, solvents, asbestos, sandblasting material, mercury, lead, or paints?		X	Yes	No	For comments see attachments
11.Involve disturbance of pre-existing contamination?	X		No	No	Vaughn, Dana M. 02/17/2017
12.Generate noise levels with off-site impacts?	X		No	No	For comments see attachments
13.Generate odor with off-site impacts?	X		No	No	Vaughn, Dana M. 02/17/2017
14.Produce light which causes disturbance?	X		No	No	Vaughn, Dana M. 02/17/2017
15.Release of radioactive materials?	X		No	No	Vaughn, Dana M. 02/17/2017
16.Involve underground or above-ground storage tanks or bulk storage?	X		No	No	Vaughn, Dana M. 02/17/2017
17.Involve materials that require special handling?		X	No	No	For comments see attachments

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Part 4. Social and Economic Effects

Would the proposed action...	No	Yes	Permit	Commitment	Information Source for Insignificance
1. Potentially cause public health effects?	X			No	Vaughn, Dana M. 02/17/2017
2. Increase the potential for accidents affecting the public?	X			No	Vaughn, Dana M. 02/17/2017
3. Cause the displacement or relocation of businesses, residences, cemeteries, or farms?	X			No	Vaughn, Dana M. 02/17/2017
4. Contrast with existing land use, or potentially affect resources described as unique or significant in a federal, state, or local plan?	X			No	Vaughn, Dana M. 02/17/2017
5. Disproportionately affect minority or low-income populations?	X			No	Vaughn, Dana M. 02/17/2017
6. Involve genetically engineered organisms or materials?	X			No	Vaughn, Dana M. 02/17/2017
7. Produce visual contrast or visual discord?	X			No	Vaughn, Dana M. 02/17/2017
8. Potentially interfere with recreational or educational uses?	X			No	Vaughn, Dana M. 02/17/2017
9. Potentially interfere with river or other navigation?	X		No	No	Vaughn, Dana M. 02/17/2017
10. Potentially generate highway or railroad traffic problems?		X		No	For comments see attachments

Part 5. Other Environmental Compliance/Reporting Issues

Would the proposed action...	No	Yes	Commitment	Information Source for Insignificance
1. Release or otherwise use substances on the Toxic Release Inventory list?	X		No	Vaughn, Dana M. 02/17/2017
2. Involve a structure taller than 200 feet above ground level?	X		No	Vaughn, Dana M. 02/17/2017
3. Involve site-specific chemical traffic control?	X		No	Vaughn, Dana M. 02/17/2017
4. Require a site-specific emergency notification process?	X		No	Vaughn, Dana M. 02/17/2017
5. Cause a modification to an existing environmental permit or to existing equipment with an environmental permit or involve the installation of new equipment/systems that will require a permit?		X	No	For comments see attachments
6. Potentially impact operation of the river system or require special water elevations or flow conditions??	X		No	Vaughn, Dana M. 02/17/2017
7. Involve construction or lease of a new building or demolition or renovation of existing building (i.e. major changes to lighting, HVAC, and/or structural elements of building of 1000 sq. ft. or more)?		X	No	For comments see attachments

Parts 1 through 4: If "yes" is checked, describe in the discussion section following this form why the effect is insignificant. Attach any conditions or commitments which will ensure insignificant impacts. Use of non-routine commitments to avoid significance is an indication that consultation with NEPA Administration is needed.

An ☒ EA or ☐ EIS Will be prepared.

Based upon my review of environmental impacts, the discussion attached, and/or consultations with NEPA Administration, I have determined that the above action does not have a significant impact on the quality of the human environment and that no extraordinary circumstances exist. Therefore, this proposal qualifies for a categorical exclusion under Section 5.2. _____ of TVA NEPA Procedures.

Project Initiator/Manager Dana M Vaughn	Date 02/17/2017
TVA Organization UNKN	E-mail dmball@tva.gov
	Telephone

Environmental Concurrence Reviewer

Ashley Pilakowski 03/15/2017

Signature

Preparer Closure

Dana M Vaughn 03/16/17

Signature

Other Environmental Concurrence Signatures (as required by your organization)

Signature

Signature

Environmental Assessment and Finding of No Significant Impact

Signature

Signature

Other Review Signatures (as required by your organization)

Attachments/References

Description of Proposed Action Continued from Page 1

The Tennessee Valley Authority (TVA) proposes to provide a grant to Erlanger Health Systems for the development of a 5 megawatt (MW) Industrial Waste Heat Recovery (WHR) and Combined Heat and Power (CHP) project located in Hamilton County, Tennessee. TVA funding would be used for the interior demolition of the Erlanger incinerator building and the construction of a WHR/CHP plant system based on reciprocating internal combustion engine (RICE) and a heat recovery steam generator (HRSG) in its place. This project is intended to utilize waste heat conversion technologies to recover existing waste heat from an industrial process and convert it to approximately 5 MW of clean electricity. Associated construction and installation of connecting infrastructure from the existing Central Energy Plant building to the new WHR/CHP would also be required. An existing paved lot will be used for the laydown area.

CEC General Comment Listing

1.	Erlanger Project Description		
	By: Dana M Vaughn	02/02/2017	
	Files: Erlanger Health System Proposal.pdf	02/02/2017	3,797.88 Bytes
2.	TVA-Erlanger Contract 11258		
	By: Dana M Vaughn	02/02/2017	
	Files: Contract 11258 Erlanger.pdf	02/02/2017	2,725.47 Bytes
3.	Photo of Incinerator Building		
	By: Dana M Vaughn	02/03/2017	
	Files: Incinerator Bldg_pic5.JPG	02/03/2017	3,464.45 Bytes
4.	Photo of Incinerator Building		
	By: Dana M Vaughn	02/03/2017	
	Files: Incinerator Bldg_pic4.JPG	02/03/2017	3,293.68 Bytes
5.	Photo of Incinerator Building		
	By: Dana M Vaughn	02/03/2017	
	Files: Incinerator Bldg_pic3.JPG	02/03/2017	2,742.11 Bytes
6.	Photo of Incinerator Building		
	By: Dana M Vaughn	02/03/2017	
	Files: Incinerator Bldg_pic2.pdf	02/03/2017	1,554.06 Bytes
7.	Photo of Incinerator Building		
	By: Dana M Vaughn	02/03/2017	
	Files: Incinerator Bldg_pic1.pdf	02/03/2017	1,547.42 Bytes

CEC Comment Listing

Part 1 Comments

- This project is a selected project for the Waste Heat Recovery Project as part of TVA's EPA Mitigation agreement (January 22, 2013).
By: Dana M Vaughn 02/15/2017

Part 2 Comments

- The proposed WHR/CHP plant construction and laydown area would occur at a previously developed site (within an existing building envelope) and no water bodies are located near the project area. Therefore, no impacts to aquatic resources, terrestrial ecology (wildlife and vegetation), and threatened and endangered species are anticipated under the proposed action.
By: Dana M Vaughn 02/15/2017
- The building is less than 50 years. All proposed piping would be by pipe bridge and would require no ground disturbance. As such this is the type of activity that has no potential to affect cultural resources.
By: Michaelyn S Harle 02/17/2017
- The proposed WHR/CHP plant construction (within an existing building envelope) and laydown area would occur at a previously developed site.
By: Dana M Vaughn 02/15/2017
- The proposed project would not involve activity within the 100-year floodplain, which would be consistent with EO 11988.
By: Carrie C Williamson 02/06/2017
- The WHR/CHP plant does not require water withdrawal.

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	By: Dana M Vaughn	02/15/2017
13.	All proposed piping would be by pipe bridge and would not result in ground disturbance.	
	By: Dana M Vaughn	02/17/2017
6.	The proposed WHR/CHP plant construction (within an existing building envelope) and laydown area would occur at a previously developed site.	
	By: Dana M Vaughn	02/15/2017
Part 3 Comments		
1.	More information on air analysis is included in the abbreviated EA that will be prepared.	
	By: Dana M Vaughn	03/15/2017
1.	The project is estimated to reduce Erlanger Health System's net CO2 equivalent emissions.	
	By: Dana M Vaughn	02/17/2017
4.	All proposed piping would be by pipe bridge and would not result in ground disturbance.	
	By: Dana M Vaughn	02/17/2017
6.	The interior of the incinerator building will be demolished. Construction and demolition debris would be managed according to all local, state, and federal requirements.	
	By: Dana M Vaughn	02/17/2017
8.	Construction and demolition debris would be managed according to all local, state, and federal requirements.	
	By: Dana M Vaughn	02/17/2017
10.	The interior of the incinerator building will be demolished. Construction and demolition debris would be managed according to all local, state, and federal requirements. A 10-day asbestos removal and demolition notification will be required.	
	By: Dana M Vaughn	02/17/2017
12.	Plant construction associated with TVA's involvement would generate some temporary, short-term noise. The noise of the new WHR/CHP plant would be less than the old incinerator. The old incinerator created approximately 90-100 dBA of noise and the CHP engines would operate at 65-70 dBA. Noise from the radiator equipment associated with the CHP plant is expected to be more than 70 but less than 90 dBA. The radiators run occasionally rather than continuously. The equipment would be furnished with noise certificates by the manufacturers. There are cooling towers near the site that are louder than the CHP equipment and they will remain in use.	
	By: Dana M Vaughn	02/17/2017
17.	Construction and demolition debris would be managed according to all local, state, and federal requirements.	
	By: Dana M Vaughn	02/17/2017
Part 4 Comments		
10.	Direct and immediate impacts from construction activities are not likely to affect local roads or traffic loads because of the short duration of the proposed actions.	
	By: Dana M Vaughn	02/17/2017
Part 5 Comments		
5.	The applicant will need to obtain an air permit from Hamilton County Air Pollution Control Bureau before construction begins.	
	By: Dana M Vaughn	02/17/2017
7.	The Erlanger Health System's Incinerator building will be renovated.	
	By: Dana M Vaughn	02/17/2017
CEC Permit Listing		
Part 3 Permits		
1.	Air Emissions Minor Source/Construction Permits	
	By: Dana M Vaughn	02/17/2017
10.	Asbestos Demolition or Removal Permit	
	By: Dana M Vaughn	02/17/2017
CEC Commitment Listing		