Red Oak Ridge Energy Center Decommissioning Plan

Introduction / Project Description

Red Oak Ridge Energy Center LLC ("Red Oak Ridge"), a wholly-owned subsidiary of Invenergy Clean Power LLC, is preparing to submit an application for a Certificate of Public Convenience and Necessity ("CPCN") to the Public Service Commission of Wisconsin ("PSCW") to construct and place in service the Red Oak Ridge Energy Center ("Project"), a natural gas-fired simple-cycle combustion turbine-based large electric generating facility ("Facility") with a generating capacity up to 1,186 megawatts ("MW") alternating current ("AC") and a 345 kilovolt ("kV") overhead generator transmission tie line ("Gen-Tie Line").

This Decommissioning Plan ("Plan") has been prepared for the Project in accordance with the PSCW Application Filing Requirements for Electric Generation Projects ("AFR"). The purpose of this Plan is to describe the means and methods that can be used to decommission the Project and reclaim, restore, and return the land altered during the construction and operation of the Project to its predevelopment condition to the extent practicable. The Plan identifies components that may be removed and the areas that may be restored once the Project has surpassed its useful lifespan.

At the end of commercial operation, Red Oak Ridge will assess whether to decommission the Project or seek to extend the life of the Project. Subject to applicable regulatory approval, should Red Oak Ridge decide to pursue continued operations, it will evaluate whether to continue with the existing equipment or to upgrade the Project with newer technologies. If Red Oak Ridge does not pursue continued operation or repowering of the Project, the decommissioning process will begin when Red Oak Ridge determines the Project is discontinued or after approximately one year without energy production. This Plan reflects the full decommissioning of the Project, including removal of all infrastructure and equipment and reclamation of the site to match previous land use, unless otherwise specified.

Background

North American Dismantling Corp ("NADC") is a Lapeer, Michigan based company that has been serving the heavy industrial demolition, commercial and environmental industry for more than 40 years. NADC has been a leader in dismantling services nationwide, providing expertise, specialized equipment, and professionalism to ensure the job is done right. Our use of the latest technology and experience combined with our customer-oriented philosophy results in efficient, safe, and economical project completion. NADC

has completed millions of square feet of total demolition, interior selective demolition, and plant strip-out in the commercial, industrial, and residential arenas, including work for major pharmaceutical, chemical, power, and automotive companies.

The author of this report, Mr. Stevens, is a Sr. Project Manager with over 40 years of experience, with more than 30 of those years being focused on industrial demolition projects, including several coal and gas fired electric power generation stations. Responsibilities have included site assessment, estimating, design, & execution of projects. Providing coordination working with engineers, stakeholders, and other team members to provide safe & cost-effective work plans and schedules.

Scope

The purpose of this Plan is to describe the means and methods that can be used to decommission the Project and reclaim, restore, and return the land altered during the construction and operation of the Project to its predevelopment condition to the extent practicable. Additionally, this Plan estimates the costs associated with site-wide decommissioning. The following tasks were completed to allow for a thorough evaluation of the Project.

- Document review
- Asset evaluation
- Demolition and decommissioning cost estimate
- Waste management cost estimate
- Site restoration cost estimate

Site Visit

Similar Invenergy-owned facilities have been visited by NADC and inform this Plan. The Nelson Energy Center, with 7FA gas turbines, was visited in September 2020. The Hardee Power Station, with 7EA gas turbines, was visited in August 2023. While not identical to the 7FA.05 gas turbines planned for the Project, substantial similarities exist between these projects to make an informed comparison for estimating purposes.

Decommissioning Process

Detailed work plans will be developed based on site designs prior to mobilizing to the site for decommissioning. Permitting requirements at the time of decommissioning will be reviewed and any necessary permits will be obtained prior to engaging in the particular activity covered by the necessary permit. All decommissioning and reclamation activities will comply with applicable Federal, State, and local requirements.

Site mobilization will include transport of equipment and personnel to the site and establishment of storm water run-off controls, staging areas, and temporary office space. Appropriate safety measures will be implemented, including notification through the Wisconsin one-call system to ensure third-party utilities are properly marked. Environmentally sensitive areas will be clearly marked to designate them as avoidance areas. Workspaces will be cleared, as necessary, to provide access and facilitate the safe movement of equipment and personnel.

Erosion and sediment control best management practices ("BMPs") will be implemented to minimize potential for erosion of site soils and sedimentation of surface waters and waters of the state. Because decommissioning will entail disturbance of more than one acre of soil, a Stormwater Pollution Prevention Plan ("SWPPP") will be prepared and an Erosion Control and Stormwater Management Plan ("ECSWMP") will be used to obtain coverage under the Wisconsin Pollutant Discharge Elimination System ("WPDES") Construction Stormwater General Operating Permit prior to initiating soil disturbing activities, as applicable. Sediment controls, such as silt fence, fiber logs, dewatering practices, and sedimentation traps and/or basins will be implemented to prevent the transport of sediment off-site during decommissioning activities. Street sweeping/scraping will be implemented to mitigate potential tracking of sediment onto public roadways.

Decommissioning activities will be conducted in strict accordance with a Health and Safety Plan that will be established prior to mobilization. Additionally, a Spill Prevention, Control, and Countermeasures ("SPCC") Plan will likely be required for decommissioning work, and will be developed accordingly.

Once mobilized, a four-man crew will go through each structure and piece of equipment to verify and document cold and dark status. They will also make sure all oils, lubricants and other liquids have been drained. Each area will be inspected for the presence of fluorescent lights, batteries, e-waste, and other regulated materials and universal waste items. These items will be packaged and sent off site for proper disposal or recycling.

Demolition crews will consist of six personnel, including two heavy equipment operators, two skilled labor/burners, and two general laborers. Crews will be supervised/led by a Project Manager, Project Superintendent, and Project Safety Officer.

Equipment will include a water truck, mechanics/lube truck, two Volvo 480 excavators with shear and hammer attachments, one Volvo 380 excavator with grapple attachment, one Cat 928G loader, one Bobcat S650 skid steer loader, and a CW 300-80-D Water Mister for dust control.

Demolition will be performed primarily by heavy equipment working top down, bay by bay or item by item. Heavy equipment will be assisted through pre-cutting and dismantling of structures and equipment that will allow pieces to come apart without excessive effort. The demolition sequence will start with ancillary structures. Each unit will be demolished by removing exhaust stacks, air inlet ducts, and all other equipment surrounding and connected to the gas turbine and generator. If scrapped, the gas turbine and generator will be removed with a combination of torch work and heavy equipment. If salvaged, a crane will remove these items.

Recyclable materials will be recycled to the extent practicable. When all recyclable materials and salvage items have been removed, the crews will use hydraulic hammers to reduce the concrete pedestals, secondary containment walls and curbs for off site disposal.

Site restoration will include torch cutting of bolts and rebar flush with slabs and subgrade pedestals to eliminate trip hazards. All disturbed areas will be cleared of debris and rough graded to drain to prevent ponding.

Sections of public roads that have insufficient strength to accommodate the traffic necessary for decommissioning will need to be improved prior to the start of hauling operations. Intersection turning radius modifications are not anticipated since components will be cut to fit on standard semitrailer trucks. The roads subjected to decommissioning traffic will be restored to a condition equal to or better than the condition of the road prior to decommissioning activities. A pre-decommissioning road survey, similar to a pre-construction survey, may be prepared so that road conditions pre- and post- decommissioning can be accurately assessed.

All poles, conductors, switches, and lines associated with the Gen-Tie Line that do not remain in use will be removed and hauled off site to a recycling facility or disposal site. Pole foundations will be removed down to four feet below grade. Pole foundation holes will be filled with a suitable clean compactable material. Transmission line decommissioning work will require specialized equipment including man lifts, cable reels, pole removal/installation lifts, etc.

Asset Evaluation

NADC's evaluation was conducted using best practice methodologies. The NADC estimator compared the equipment and material in the planned units with Nelson and Hardee, scaled the equipment layout drawings, and collected area and distance data. This information was entered into an estimating spreadsheet where scrap and recycled

weights were determined. NADC's asset manager assigned recycled pricing per category of materials.

Asset Tables

Table 1 below breaks down the asset data tabulated through NADC's comparisons and their reference material takeoffs. Table 1 assigns each item a category (i.e., stainless steel, copper, carbon steel). Non-ferrous values included copper and aluminum using the American Metal Market ("AMM") for copper scrap delivered to Chicago. Ferrous values were indexed using the AMM for P&S, 1 heavy melt steel (#1HMS), and shred. The American Metal Market is an online provider of metal pricing information for the U.S. steel, nonferrous and scrap markets. Table 1 below includes the metals (e.g. copper etc.) in the structures, gas turbines, pipe, wiring, generators, and transformers.

Various pieces of equipment may be suitable for salvage and/or reuse, such as gas turbines, generators, switch gear, and transformers. There is an existing market for the GE H35 generators as well as a wide selection of parts. It has been reasonable to assume a return of between 5% and 10% of purchase for salvageable equipment.

For this Plan, NADC included an estimate for asset sales of switch gear and motors.

Table 1: Scrap Asset Estimates

Commodity	Amount	Unit Value	Extended Value
Carbon Steel – P&S	476 GT	$225.00	$107,100.00
Carbon Steel - HMS	544 GT	$195.00	$106,080.00
Carbon Steel - Shred	340 GT	$210.00	$71,400.00
Aluminum	23,626 lbs	$0.50	$11,813.00
Copper #1	35,483 lbs	$3.85	$136,609.55
Copper Wire	22,177 lbs	$2.50	$55,442.50
Copper #2	31,048 lbs	$3.45	$107,115.60
Motors	1	LS	$100,000.00
Switch Gear	1	LS	$200,000.00
		Total Value	**$895,560.65**

Demolition and Decommissioning Cost Estimate

NADC developed individual cost estimates for each Project component based on the materials present and the level of effort required to demolish the component. Individual work items were developed capturing the quantities that would be removed as part of the closure effort. Production rates realized on similar projects were applied against material quantities to develop the overall task duration and the subsequent cost estimate. The

methodologies and production rates used are based on actual experience performing similar work.

The major work items include:

- Pre-mobilization work plans, agency meetings, pre-construction meetings
- Mobilization
- Universal waste materials removal
- Demolition of buildings, and equipment
- Demolition of above grade pedestals and curbs
- Load out waste materials
- Site restoration
- Demobilization
- Project closeout documents

Table 2: Decommissioning and Demolition Cost Estimate

Item	Duration (Days)	Cost	Scrap Value	Estimated Cost
Submittals/Plans/Permits	5	$ 20,039.94	(0.00)	20,038.47
Mobilization/Site Setup	5	$113,559.66	(0.00)	113,551.34
Remove ORM/Universal Waste	5	$ 68,539.12	(0.00)	68,529.33
Demolition/Superstructures	58	$2,047,345.02	($895,560.65)	1,151,784.37
Demolition/Concrete	26	$223,734.26	(0.00)	223,716.63
Hauling and Disposal	16	$ 79,008.17	(0.00)	78,990.55
Site Restoration	6	$480,151.01	(0.00)	80,139.26
Demobilization	5	$107,637.26	(0.00)	107,628.44
Project Close Out	3	$ 11,959.70	(0.00)	11,958.72
Total Project	129	$2,751,974.13	($895,560.65)	$1,856,413.48

Waste Management Cost Estimate

The basis for the estimate of costs to manage waste materials was determined from take offs derived from the equipment layout drawings and experience with this type of work. The individual costs for handling and disposal of these wastes are included in Table 2: Decommissioning and Demolition Cost Estimate. The primary waste streams relevant to this scope include:

- Demolition Debris (drywall, insulation, etc.)
- Concrete from equipment pads and curbs
- Universal Wastes including light bulbs, ballasts, mercury switches and batteries.

Table 3 below breaks out the primary waste streams by cubic yards for debris and concrete. Universal wastes are containerized units (boxes, drums, sealed buckets).

Table 3: Primary Waste Streams by Weight

Facility	Demo Debris CY	Concrete CY	Universal Waste Units
Red Oak Ridge Energy Center	192 tons (768 CY)	8945 tons (4417 CY)	160 packages

Assumptions, Conditions, and Exclusions

In order to generate an accurate estimate, NADC made certain assumptions about the site conditions and other relevant factors that may impact asset values and demolition costs. The following items were included in this budget as assumptions, conditions, and/or exclusions:

1. The decommissioning and demolition cost estimate assumed removal of all above grade structures and equipment. No subgrade structures including foundations, and subsurface site utilities are included.
2. No office equipment and/or furniture were included in the asset evaluation.
3. NADC applied scrap value to most of the assets. Certain components may have significant value for reuse and resale. The gas turbines, generators, Motor Control Centers, and transformers are examples.
4. Asset values based on metals market pricing on 16 September 2025.
5. Costs assume electric utilities for temporary offices and a source of water for dust control will be provided by Red Oak Ridge Energy Center LLC.
6. Decommissioning cost estimate assumes recovery of bulk products from pipes and tanks will occur prior to decommissioning. NADC anticipates residual amounts of petroleum products will be encountered.
7. No funds for offsite disposal of residual liquids, rinses, sulfur by-products, etc., were included.
8. Scrap value based on AMM for copper scrap delivered to Chicago and Midwest stainless scrap.
9. Demolition costs and scrap values based on 2025 dollars. It is assumed that escalation will be equivalent for both, such that the future value difference between demolition costs and salvage will remain roughly the same.

Schedule

It is anticipated that decommissioning activities can be completed in a six-month period. The estimated costs for decommissioning are tied to assumptions about the amount of equipment mobilized, the crew sizes, weather and climate conditions, and the productivity of the equipment and crews.

Conclusion

The total estimated cost of decommissioning the Project is approximately $2,751,974.13. The estimated salvage/scrap value of the Project is approximately $895,560.65. The net decommissioning cost after accounting for resale and salvage values is approximately $1,856,413.48.

The following is a list of items that could potentially increase costs or decrease asset value:

- Market fluctuation of scrap commodities.
- Large increases in fuel pricing.
- Large quantities of waste products left in vessels at facility closure.

Bud Stevens
Sr. Project Manager/Estimator