

Daniel F. Caruso  
Chairman

# STATE OF CONNECTICUT

## CONNECTICUT SITING COUNCIL

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**CERTIFIED MAIL  
RETURN RECEIPT REQUESTED**

July 27, 2007

Philip M. Small, Esq.  
Michael E. Kozlik, Esq.  
Brown Rudnick Berlack Israels LLP  
CityPlace I, 185 Asylum Street  
Hartford, CT 06103-3402

RE: **PETITION NO. 805** - Ansonia Generation LLC petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed construction, maintenance, and operation of a 58.4 MW combined heat and power natural gas-fired electric generating facility and transmission line tap located at 75 Liberty Street, Ansonia, Connecticut.

Dear Attorney Small and Attorney Kozlik:

At a public meeting held on July 26, 2007, the Connecticut Siting Council (Council) considered and ruled that this proposal would not have a substantial adverse environmental effect, and pursuant to General Statutes § 16-50k would not require a Certificate of Environmental Compatibility and Public Need with the following conditions:

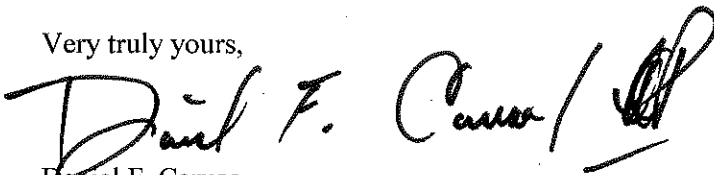
1. AnGen shall comply with all applicable Department of Environmental Protection permits.
2. AnGen shall submit a copy of the New Source Review Permit application as required by the Department of Environmental Protection.
3. AnGen shall re-evaluate and mitigate, if necessary, potential entrainment of fish eggs and larvae in the Naugatuck River and impingement, per the Department of Environmental Protection comment letter dated May 4, 2007.
4. AnGen shall comply with Department of Transportation conditions set forth in the Department of Transportation letter dated May 31, 2007.
5. AnGen shall comply with the conditions set forth by the State Historic Preservation Office in a draft email dated April 19, 2007.
6. The facility and related appurtenances, equipment and devices shall meet or exceed federal and state requirements for safety, noise emissions and water and air pollution.

7. AnGen shall file a Development and Management plan to the Council prior to the commencement of facility construction and shall include:
  - a. Final details for the heat recovery steam generator;
  - b. Final site plans including the exhaust stack, transmission line tap and location of equipment;
  - c. Results of the study on potential entrainment of fish eggs and larvae in the Naugatuck River and impingement; and
  - d. Construction work schedule.

This decision is under the exclusive jurisdiction of the Council and is not applicable to any other modification or construction. All work is to be implemented as specified in the petition, dated March 13, 2007 and subsequent filings.

Enclosed for your information is a copy of the staff report on this project.

Very truly yours,

A handwritten signature in black ink that reads "Daniel F. Caruso" followed by a stylized flourish.

Daniel F. Caruso  
Chairman

DFC/CML

Enclosure: Declaratory Ruling and Staff Report dated July 26, 2007

- c: The Honorable James T. DellaVolpe, Mayor, City of Ansonia  
Peter Crabtree, Zoning Enforcement Officer, City of Ansonia  
Parties & Intervenors

**PETITION NO. 805** - Ansonia Generation LLC petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed construction, maintenance, and operation of a 58.4 MW combined heat and power natural gas-fired electric generating facility and transmission line tap located at 75 Liberty Street, Ansonia, Connecticut.

Connecticut

Siting

Council

July 26, 2007

### **Declaratory Ruling**

Pursuant to the record in this proceeding, Ansonia Generation LLC's (AnGen) proposed construction of a 58.4 MW combined heat and power natural gas-fired electric generating facility and transmission line tap located at Ansonia Copper & Brass, Inc. at 75 Liberty Street in Ansonia, Connecticut, will not have a substantial adverse environmental effect and pursuant to General Statutes § 16-50k(a), will not require a Certificate of Environmental Compatibility and Public Need.

The proposed facility shall be implemented substantially as specified in the Council's record in this matter and subject to the following conditions:

1. AnGen shall comply with all applicable Department of Environmental Protection permits.
2. AnGen shall submit a copy of the New Source Review Permit application as required by the Department of Environmental Protection.
3. AnGen shall re-evaluate and mitigate, if necessary, potential entrainment of fish eggs and larvae in the Naugatuck River and impingement, per the Department of Environmental Protection comment letter dated May 4, 2007.
4. AnGen shall comply with Department of Transportation conditions set forth in the Department of Transportation letter dated May 31, 2007.
5. AnGen shall comply with the conditions set forth by the State Historic Preservation Office in a draft email dated April 19, 2007.
6. The facility and related appurtenances, equipment and devices shall meet or exceed federal and state requirements for safety, noise emissions and water and air pollution.
7. AnGen shall file a Development and Management plan to the Council prior to the commencement of facility construction and shall include:
  - a. Final details for the heat recovery steam generator;
  - b. Final site plans including the exhaust stack, transmission line tap and location of equipment;
  - c. Results of the study on potential entrainment of fish eggs and larvae in the Naugatuck River and impingement; and
  - d. Construction work schedule.

**Petition No. 805**  
**Ansonia Generation LLC**  
**Ansonia, CT**  
**Staff Report**  
**July 26, 2007**

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**Introduction**

On March 13, 2007, Ansonia Generation LLC (AnGen) submitted a petition (Petition) to the Connecticut Siting Council (Council) for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed construction of an approximately 58.4-megawatt (MW) (net) combined heat and power natural gas-fired electric generation facility, including associated equipment and a transmission line tap.

This petition was submitted in accordance with Connecticut General Statutes (CGS) §§ 4-176(a) and 16-50k(a) and Connecticut Agencies Regulations § 16-50j-38 *et seq.* CGS § 16-50k(a) states that the Council shall approve through a Petition: “(1) the construction of a facility solely for the purpose of generating electricity...at a site where an electric generating facility operated prior to July 1, 2004, [or] (2) the construction or location...of any customer-side distributed resources project or facility...with a capacity of not more than sixty-five megawatts, so long as such project meets air quality standards of the Department of Environmental Protection...” The proposed project would be located at a site where an electric generating facility operated prior to July 1, 2004; and would be less than 65 megawatts and meet Department of Environmental Protection (DEP) air quality standards.

On May 9, 2007, the Council held a public meeting, after giving due notice, beginning at 3:00 p.m. and continuing at 7:00 p.m. in the Aldermanic Chambers of the Ansonia City Hall, 253 Main Street, Ansonia, Connecticut. The Council held a public field review of the proposed site at 2:00 p.m. on May 9, 2007.

The proposed site is located at Ansonia Copper & Brass, Inc. (ACB), 75 Liberty Street in Ansonia. The ACB property is zoned as a Heavy Industrial District and is approximately 35 acres with approximately 900,000 square feet of office space. ACB currently manufactures copper alloy rods and wires at the plant.

The proposed project would provide benefits to the Southwest Connecticut transmission system as a reactive resource at a 115-kilovolt (kV) location in the Naugatuck Valley. The proposed facility would allow ACB to control energy costs associated with its manufacturing operations. Also, the availability of relatively low cost steam and electricity may allow ACB to consolidate its Waterbury, Connecticut manufacturing operations at the proposed site and to attract other manufacturing businesses to the proposed site.

The proposed facility would increase revenue to the town due to employment of both permanent staff and construction workers, and increased tax revenue to the town.

**State Agency and Municipal Consultations**

The Council received comments from the State of DEP, Department of Transportation (DOT) and Department of Public Health (DPH).

The DEP submitted comments to the Council on May 7, 2007. The DEP noted the potential permits that may be required for the proposed project include: A Diversion Permit; A New Source Review Air Permit; A Title V Operating Permit; and A Title IV Acid Rain Permit. The DEP also recommends re-evaluation and possible mitigation for potential entrainment of fish eggs and larvae in the Naugatuck River and impingement.

The DOT submitted comments in a letter dated May 31, 2007 stating no objection to the proposed project, particularly the transmission line tap, with these conditions:

- that a minimum 22 foot 6 inch clearance from the top of the highest rail must be maintained with support poles located outside of the railroad right-of-way.
- The DOT Office of Rails requests that plans for the transmission line be issued to the DOT for formal review and approval.
- Bonding and grounding be provided to mitigate any stray or induced currents in the vicinity of railroad facilities.
- AnGen shall address all DOT and Metro-North concerns and issues.
- AnGen shall provide the DOT and Metro-North with a two-week notice prior to energizing the line.
- AnGen shall coordinate all trackside activities with Metro-North.
- AnGen shall obtain all necessary railroad permits prior to entering railroad property or performing any activities having an impact or potential impact on railroad property or operations.

The DPH Drinking Water Section has no comments on the proposed project.

AnGen has had discussions regarding the benefits of the proposed project with Town of Ansonia officials, including Mayor James T. Della Volpe and the head of the Economic Development Office, Claude L. Perry, Sr. AnGen has also had discussions with state and federal officials, including the offices of U.S. Representative Rosa L. DeLauro, and State Representative Linda M. Gentile.

On April 23, and April 24, 2007, AnGen held open house meetings at the proposed site to allow interested parties to discuss the project. Notice of the meetings were provided to the public via a sign, which was located at the corner of Liberty and Third Streets on April 16, 2007; and flyers, which were distributed to neighboring residences and business on April 18, 2007.

On April 23, 2007, AnGen appeared before the City of Ansonia Planning and Zoning Commission to discuss the proposed project. The primary concerns of the Planning and Zoning Commission were noise, air pollution and visual impacts. The Commission suggested that a higher stack may mitigate local air impacts. The noise at the proposed facility would meet all applicable state and local requirements. AnGen would conduct pre- and post-construction/operation noise monitoring.

At the April 24, 2007 meeting, AnGen provided a description of the proposed project to the public. Approximately five interested persons attended the meeting, including the Chairman of the Planning and Zoning Board, a representative of the neighboring condominium association and news reporters. Public comments involved the possibility of increasing the height of the proposed exhaust stack.

In a letter dated April 25, 2007, The Ansonia Planning and Zoning Commission provided concerns and comments on the proposed project to counsel for AnGen. The Commission's concerns include:

- The proposed facility would be located at or near the geographic center of Ansonia's downtown district; the district is built up and densely populated; the area would continue to be frequented by residents and shoppers; and the district is the subject of a planning program leading to the adoption of the *City Center Plan 2005*.
- Anticipated changes should not be detrimental to present and future residents, workers or shoppers and changes should be implemented to preserve and enhance the character of the district.
- The facility should be shut down during periods of severe air pollution. Noise levels must be limited.
- Caution must be taken and additional efforts must be made in installing and operating the proposed facility and related appurtenances, equipment and devices to meet or exceed federal and state requirements for safety, noise emissions and water and air pollution.
- The proposed steam stack should be constructed to an elevation high enough to assist in the efficient and rapid dissipation of steam and other fumes and gases emitted.
- Site and area security devices must be properly installed and maintained on a 24/7 basis.

#### **Site Description**

The proposed property is bordered on the west by the Naugatuck River, Farrel Industries to the south, Canal Reservoir to the north, and Liberty, Star, Third and North Fourth Streets on the east. Multi-family residential uses are located on Liberty Street. United Illuminating Company's (UI) Ansonia Substation is located on the west side of the Naugatuck River, approximately ¼ mile to the southwest of the proposed site.

Most of the components of the proposed facility would be installed within the existing Flat Wire Mill building (Building), which is located on the east central portion of the ACB property. The Building is approximately 420 feet by 200 feet (84,000 square feet). The Building is used for the manufacturing of flat copper alloy wire, which would be relocated to another portion of the property to allow space for the proposed facility. All existing equipment in the Building would be relocated and re-used, sold to third parties, or scrapped.

From 1990 to 2000, a 1,500 kilowatt steam turbine was operated in the Boiler building in the center of ACB property. The turbine was used as an emergency generation unit for ACB and was available to export power to the grid at the request of UI and ISO-New England.

### **Proposed Project**

AnGen is proposing a nominal 58.4 MW natural-gas fired combined heat and power electric generation facility. Equipment proposed for the facility includes:

- a General Electric LM6000 combustion turbine;
- a heat recovery steam generator (HRSG) with selective catalytic reduction and carbon monoxide catalyst equipment for emissions control;
- a nominal 12.5 MW induction-extraction condensing steam turbine;
- an approximately 1,000 square foot switchyard; and
- an approximately 1,540-foot 115-kV transmission line tap to the existing 115-kV Ansonia Substation.

The proposed transmission line tap is expected to be installed overhead from UT's existing 115-kV Ansonia Substation to the proposed site. The transmission line would run overhead to minimize soil disturbance and to avoid installation beneath the railroad tracks that are located on the ACB property.

The proposed indoor equipment includes the combustion turbine generator, the steam turbine generator, steam turbine condenser, ancillary equipment such as feedwater and condensate pumps, the water treatment system, sump pumps, motor control centers, and the control room. A gas compressor is proposed to be enclosed, and a demineralized water storage tank may be located outside the Building. The HRSG would be mostly located within the Building; however, a portion may extend outside of the Building due to the length and height of the HRSG.

The proposed 92-foot exhaust stack would be located either outside, adjacent to the Building, or within the Building and penetrating the Building roof. The proposed cooling tower would be located between the Building and the Rod Mill. The proposed switchyard would be located within or adjacent to the Building.

A portion of the southwest section of the Building wall and roof would need to be removed to allow the access of construction equipment into the Building. The wall and roof would be replaced in an architecturally compatible manner.

Natural gas service to the site would be obtained from Yankee Gas Services Company. An existing six-inch, 250 pressure per square inch gauge (psig), distribution line currently supplies ACB. During construction of the proposed project, ACB would replace the existing gas distribution line with a new high-pressure line, which would bring in gas at approximately 400 to 600 psig. A compressor would be installed in the Building, within a 35 foot by 25 foot acoustically treated room, to increase the pressure of the natural gas to approximately 700 psig.

The proposed switchyard would be approximately 1,000 square feet and would include 13.8-kV switchgear and a 13.8/115-kV transformer. The switchyard may be located either inside or outside of the Building, depending on the cooling requirements of the transformer. The 13.8-kV switchgear would connect to ACB's internal electric distribution system to supply the electric needs of ACB and any other on-site users.

Following the removal of existing ACB equipment from the proposed site, which may include reinforced foundations, pilings (if necessary) for major equipment would be poured and structural support steel would be erected within the Building where required.

### **Transmission Line Tap**

The proposed 13.8/115-kV transformer would connect to the existing Ansonia Substation 115-kV transmission lines supplying UI's Ansonia 115/13.8 kV Substation through a transmission line tap. UI would require AnGen to have an interconnection agreement for the proposed project. The new 115-kV transmission line is expected to connect to the existing 115-kV grid through a proposed three 115 kV breaker ring bus arrangement on UI owned land. The height of the poles used for the proposed transmission line has yet to be determined.

The new 115-kV transmission line is expected to connect with an existing 115-kV tower by tapping the conductors at the tower level or by installing a ring bus on UI owned land. The proposed interconnection would reduce the amount of construction within the substation compared to a direct interconnection.

### **Safety**

There are two fire hydrants on the ACB property within 100 yards of the proposed site. The Ansonia fire department is located within 1,000 yards of the proposed site. AnGen proposes to label on-site gas shut-off valves and electric circuit breakers and train employees in fire prevention and fire suppression when appropriate.

The combustion turbine equipment would be equipped with a fire and gas detection and protection system, which would include optical flame detection, hydrocarbon sensing and thermal detectors and fire suppression piping and nozzles.

### **Environmental Concerns**

#### Air

Prior to the commencement of construction, AnGen would perform an environmental inspection of all portions of the property that would be impacted by construction. Since most of the proposed equipment would be located inside the Building, minimal environmental impacts are expected. Reinforcement of the concrete floor and pilings may be required. In this case, excavated soils would be tested and transported off-site for reuse or disposal.

DEP permits required for the construction and operation of the proposed project include:

- a DEP New Source Review air emission permit;
- a federal Clean Air Act Title V operating permit; and
- any required water discharge permits

AnGen expects the proposed project to meet DEP air quality standards. Water injection, a selective catalytic reduction (SCR) and a carbon monoxide (CO) catalyst would be used to reduce air emissions. To minimize construction-related air impacts, construction would occur within the Building and any dust that escapes the Building would be swept on a regular basis. Outdoor construction air impacts would be minimized through the use of dust suppression techniques, including wetting the construction area during the construction process, and sweeping. Trucks used for carrying excavated material would be covered and washed before leaving the site.



The proposed plant is expected to be a minor air emissions source according to DEP air quality regulations. The emissions controls listed below would be used to comply with air quality requirements:

- Nitrogen oxide (NO<sub>x</sub>) emissions: water injection in conjunction with SCR.
- CO emissions: oxidation catalyst and good combustion practices.
- Sulfur dioxide and other sulfur emissions: low-sulfur, pipeline quality natural gas.

Volatile organic compounds: good combustion practices and the oxidation catalyst.

AnGen performed dispersion modeling analysis to determine the potential impact from the proposed facility. Multiple stack heights were analyzed to determine the effects to the surrounding area. The stack heights include the proposed 92-foot stack and stack heights of 100 feet, 110 feet, 120 feet and 130 feet.

Although Nitrogen Oxide (NO<sub>x</sub>) and Particulate Matter (PM<sub>10</sub>) levels from the proposed project are below the significant impact levels (SIL), they represent greater impacts as a percentage of the SIL. The peak NO<sub>x</sub> level and, therefore, maximum impacts from NO<sub>x</sub> would occur 1200 meters downwind of the stack. A secondary maximum, which is a lesser concentration than the peak, would occur at 200 meters downwind of the stack and decrease with increased stack height. The secondary maximum is the result of aerodynamic downwash. Aerodynamic downwash is "the rapid descent of a plume to ground level with little dilution and dispersion as a result of alteration of background air flow characteristics caused by the presence of buildings or other obstacles in the vicinity of the emission point."

The maximum impacts of PM<sub>10</sub> would occur at 200 meters downwind of the proposed stack the effects of which would decrease with increased stack height. This near field peak is due to aerodynamic downwash. A secondary maximum would occur at 1200 meters downwind of the stack.

The results of the modeling analysis show that the maximum impact on the surrounding neighborhood would not be significantly impacted by stack height. A taller stack would decrease the predicted concentrations in the near field, 200 meters downwind from the stack; however, the cost of increasing the stack above the proposed 92 feet would be approximately \$5,000 per foot. AnGen has determined that the maximum predicted concentrations from pollutants are below the National Ambient Air Quality Standards (NAAQS) and the DEP/Environmental Protection Agency SIL, as shown in the table below:

Pollutant	Avg Per.	Primary NAAQS	Secondary NAAQS	SIL	92-foot	100-foot	110-foot	120-foot	130-foot
NO <sub>2</sub>	Annual	100	100	1	0.83	0.82	0.82	0.81	0.81
SO <sub>2</sub>	Annual	80	None	1	0.21	0.21	0.20	0.20	0.20
	24-hr	365	None	5	0.81	0.72	0.62	0.51	0.50
	3-hr	None	1,300	25	2.07	2.06	2.04	2.03	2.01
PM <sub>10</sub>	Annual	50	50	1	0.88	0.88	0.87	0.87	0.86
	24-hr	150	150	5	3.46	3.09	2.67	2.17	2.15
PM <sub>2.5</sub>	Annual	15	15	NA	0.88	0.88	0.87	0.87	0.86
	24-hr	65	65	NA	3.46	3.09	2.67	2.17	2.15
CO	8-hr	10,000	10,000	500	7.20	7.15	7.10	7.05	7.00
	1-hr	40,000	40,000	2,000	9.60	9.54	9.46	9.40	9.34

The New Source review permit was expected to be filed with the DEP during the week of May 13, 2007. The federal Clean Air Act Title V permit is an operating permit that is not required until up to 12 months after the plant is in operation. Typically the requirements that the DEP developed as part of the New Source review process is the same information required for the Title V permit.

#### Erosion and Sedimentation

A soil erosion and control plan would be implemented to minimize runoff of silt, dust, and soil into the existing storm drainage system or into the Naugatuck River. Control measures would be inspected daily, and cleaned and repaired when necessary.

AnGen would prepare a storm water pollution prevention plan in accordance with the requirements of the DEP Stormwater General Permit.

#### Noise

To minimize potential noise impacts, any major noise generating construction activity would be performed from Monday through Friday, 7:00 a.m. to 6:00 p.m. and from 8:00 a.m. to 6:00 p.m. on weekends.

AnGen does not expect impact of noise or air pollution on the city center. Local and state noise requirements would be followed for the construction and operation of the proposed facility.

#### Water

At the time of the hearing, AnGen was in the process of applying for a water diversion permit from the DEP. The total process water consumption that AnGen would use is approximately 256 gallons per minute (gpm) or 368,000 gallons per day (gpd). The process water would be supplied by ACB, which has a DEP water diversion registration for 4.32 million gpd.

The proposed facility would require a separate water diversion permit because AnGen is a separate entity from ACB, and the water is being used for purposes not covered by the existing diversion registration of ACB.

Water used at the proposed facility would be discharged to the publicly owned treatment works (POTW). The facility would discharge approximately 55 gpm or 80,000 gpd of wastewater, which would be treated on-site and discharged to the local sewer treatment authority. AnGen would determine the ability of the POTW to handle the increased flow without impacting the system.

#### Fish, Wildlife and Vegetation

There are no federally-listed or proposed threatened or endangered species or critical habitat known to occur within the project area.

### Historical/Architectural

The State Historic Preservation Office (SHPO) has drafted a letter stating that the proposed project would have no adverse effect with the following conditions:

- Prior to adaptive use-related activities, AnGen or its affiliates shall document Ansonia Copper & Brass to the standards of the SHPO. Documentation shall consist of narrative text, photographs and/or high-quality digital images, and index of photographs and a photographic site plan. Photographs should include exterior and interior perspectives and pertinent details. Final documentation shall be provided to the SHPO for permanent archiving and public accessibility.
- AnGen or its affiliates shall provide, if available, copies of any published corporate history, the production/process book and the equipment/machinery auction catalog for Ansonia Copper & Brass to the SHPO.
- AnGen or its affiliates shall prepare and submit a brief history and description of Ansonia Copper & Brass to the *Society for Industrial Archeology New England Chapters Newsletter*, including project-related information, photographs and maps.

### Visibility

The visual impact of the proposed facility would be consistent with the existing aesthetics of ACB, which includes an existing 150-foot stack. Most of the proposed equipment would be located within an existing Building, leaving the proposed exhaust stack and a portion of the HRSO visible above the existing Building roof.

There are approximately 100 residences within a 1,000 foot radius of the proposed facility.

### Electric and Magnetic Fields

AnGen would take electric and magnetic field readings at the facility prior to construction and following commencement and operation. Readings would be taken at receptors including metal structures and any crossing of conductors along the right-of-way.

### Traffic

An increase in traffic to the proposed site is expected during construction. Approximately 15 vehicles per day, Monday through Friday (during non-school hours) would be used for delivery of construction materials for approximately 78 weeks. Additionally, during the peak of construction, the proposed project would employ approximately 60 workers; therefore 60 additional vehicle roundtrips are expected per day during the 18-month construction and start-up period.

### DPUC Grant

ACB has applied to the Connecticut Department of Public Utility Control (DPUC) in an *Application of Ansonia Copper & Brass, Inc. for a Capital Grant and Financing for Customer-Side Distributed Generation Resources.* The DPUC issued a draft decision on February 28, 2007, concluding that the proposed project would reduce federally mandated congestion charges and would be eligible for a customer-side distributed generation capital grant in the amount of \$28,966,000 and for subsidized long-term financing in the amount of \$45,344,000.

### **Recommendations**

Staff recommends approval of the proposed project with the following conditions:

- AnGen shall comply with all applicable DEP permits.
- AnGen shall submit a copy of the New Source Review Permit application as required by the DEP.
- AnGen shall re-evaluate and mitigate, if necessary, potential entrainment of fish eggs and larvae in the Naugatuck River and impingement, per the DEP comment letter dated May 4, 2007.
- AnGen shall comply with DOT conditions set forth in the DOT letter dated May 31, 2007.
- AnGen shall comply with the conditions set forth by the SHPO in a draft email dated April 19, 2007.
- The facility and related appurtenances, equipment and devices shall meet or exceed federal and state requirements for safety, noise emissions and water and air pollution.
- AnGen shall file a Development and Management plan to the Council prior to the commencement of facility construction and shall include:
  - a. Final details for the HRSG;
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