



CITY OF GLENDALE, CALIFORNIA REPORT TO THE CITY COUNCIL

AGENDA ITEM

Report: Grayson Repowering Project and GWP Power Supply Planning

- (1) Resolution of the City Council of the City of Glendale, California, amending Resolution 22-34 to provide direction to staff regarding the implementation of the Grayson Repowering Project utilizing five Wartsila engines; amending Resolution 22-127 to add the procurement of Battery Energy Storage System to the scope of the Request For Proposals for the Balance of Site work; and authorizing the City Manager or his designee to execute a contract, and all related and necessary documents, for the engineering, procurement, and construction of five Wartsila engines and associated Power Island Equipment and Facilities.
- (2) Resolution of the City Council of the City of Glendale, California, amending Resolution 22-34 to provide direction to staff regarding the implementation of the Grayson Repowering Project utilizing three Wartsila engines; amending Resolution 22-127 to add the procurement of Battery Energy Storage System to the scope of the Request For Proposals for the Balance of Site work; and authorizing the City Manager or his designee to execute a contract, and all related and necessary documents, for the engineering, procurement, and construction of three Wartsila engines and associated Power Island Equipment and Facilities.
- (3) Motion authorizing the City Manager, or his designee, to enter into a Collectible Work Authorization (CWA) agreement with the Southern California Gas Company, in the not to exceed amount of \$400,000 for services related to the improvement and upgrade of Southern California Gas Company facilities related to the Grayson Repowering Project. The form of said agreement shall be subject to the approval of the City Attorney.

COUNCIL ACTION

Item Type: Action

Approved for December 13, 2022 **Calendar**

EXECUTIVE SUMMARY

This report provides an update on the Grayson Repowering Project and GWP power supply planning, and seeks City Council authorization to execute contracts and procurement strategies, and a resolution authorizing the City Manager to execute a contract for the engineering, procurement, and construction of five Wartsila engines and associated power island equipment and facilities. The report also includes a recap on

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the City's discussions with Los Angeles Department of Water & Power (LADWP) regarding obtaining reserve power for Glendale, and the status of negotiations with Tesla.

COUNCIL PRIORITIES

Infrastructure: The Grayson Repowering Project will replace the aging infrastructure at the Grayson Power Plant with state-of-the-art generation and storage technology providing GWP with the ability to quickly start and generate smaller increments of power when needed, the ability to balance and integrate renewable resources, and the ability to store energy that is a major step in transitioning the City toward a 100% renewable power portfolio.

Environmental Stewardship. The Grayson Repowering Project and other clean energy initiatives underway at GWP implement the City Council's direction to pursue sustainable and clean energy solutions for the City.

RECOMMENDATION

That the City Council authorize the following agreements and actions associated with the Grayson Repowering Project:

- a. Adopt a resolution authorizing the City Manager, or his designee, to enter into and execute a contract, and all related and necessary documents, for the engineering, procurement, and construction of five (5) Wartsila engines and associated power island equipment and facilities; and
- b. Collectible Work Authorization (CWA) agreement with the Southern California Gas Company, in the amount not to exceed \$400,000 for services related to the improvement and upgrade of Southern California Gas Company facilities related to the Grayson Repowering Project

An optional resolution is included above for Council to provide direction to staff to prepare the necessary actions for Council approval for the engineering, procurement, and construction of three Wartsila engines and associated power island equipment and facilities for the Grayson Repower Project.

BACKGROUND

The Grayson Power Plant, first commissioned in the 1940s, is well beyond its functional design life and needs to be modernized to continue to meet the energy needs of the City of Glendale and its residents and businesses.

Over the past seven years, the City Council, along with City staff, has explored, analyzed, and developed options for, and alternatives to, the originally-proposed, 262 megawatt (MW) repowering of the Grayson Power Plant in order to minimize the City's carbon footprint and provide clean reliable power to the community. For reference, a chronology of key dates for the Grayson project is attached to this report as Exhibit 1.

The City's clean power goals must be balanced against the City's obligation to ensure that a reliable source of power is always available to meet the City of Glendale's needs. Glendale's Power, Energy Needs and Supplies:

Glendale needs both power capacity (the maximum amount of power that a generator can produce, measured in Megawatts “MW”) and energy (the amount of electric power that is produced and used over time, measured in Megawatt-hours, “MWh”). Power is the size of the generator(source) or the size of the load(sink); Energy is the amount of electricity actually produced over time to power lights and other loads. Even with Glendale’s investment in local rooftop solar, energy efficiency, and demand response, the need for capacity and energy are expected to increase over time due to growing electric load coupled with increased electrification of vehicles and buildings.

Capacity

To comply with California Energy Commission (CEC) requirements, GWP must maintain sufficient power generation resources to meet Glendale’s peak demand (peak load) as well as provide adequate reserves. This is essentially both for meeting the criteria for a successful IRP, as well as meeting our system operation obligations to our Balancing Authority, LADWP. Glendale’s historic peak load is 346 MW in 2017, and on that day, GWP delivered 5,654 MWh of energy. The peak load in subsequent years has been similar, in form and relative magnitude, and is now expected to grow with increasing emphasis on electrification of buildings and vehicles, as well as continued private development. For example, based upon the modeling in the 2019 Integrated Resource Plan (IRP) the forecasted peak load will be 398 MW by 2027. In addition to meeting peak load, GWP must maintain backup power (reserves) at the ready in case it loses its two largest individual resources -- the N-1 and N-1-1 contingencies.

GWP staff is working with Ascend Analytics to develop models in preparation for the 2024 IRP. The “loss of load model”, used to identify hours each month over multiple years that have insufficient capacity to meet load, forecasts a peak load of 456 MW in 2027. This model includes real-world projects and system forecasts like Glendale’s share of the CEC projected transportation electrification numbers (3.2 million electric vehicles by 2030 in California), two multi-family residential towers at the current Sears building location (8 MW total; projected to be online in 2025), and a movie/sound studio located on San Fernando Road not far from the Grayson Power Plant (10 MW; projected to be online 2025). The latter two being real examples of load growth in the very near future. The table below identifies the megawatt coverage needed for both models under an N-1 and N-1-1 scenario. These scenarios represent the reserve obligations that GWP has as a load serving entity in the LADWP balancing authority area. Essentially, GWP must keep energy supply in reserve in order to supply sufficient energy to meet the two largest energy supplies to Glendale in case they are lost or cannot be delivered to Glendale’s electric grid.

	2019 IRP Model	New Model
Forecasted peak load (2027)	398 MW	456 MW
N-1 Contingency (Pacific DC Intertie)	100 MW	100 MW
N-1-1 Contingency (Southern Transmission System)	64 MW	64 MW
Total	562 MW	620 MW

The below table provides the sources of generation available to cover the City’s capacity requirements. The column identified as “Original Capacity” are the numbers provided with the original report to Council on August 16, 2022, and assuming all such resources are developed and operating at full capacity. The column identified as “Current Capacity” (i) represents a three Wartsila engine installation at Grayson, (ii) includes the Sunrun Virtual Power Plant (VPP) project removed, and (iii) assumes the remaining 25 MW of Distributed Energy Resources (DER) will be fully realized even though only 3 MW have been realized thus far.

Resource (existing and <i>proposed</i>)	Original Capacity	Current Capacity
Existing Transmission (100 MW Pacific DC, 112 MW Southwest Transmission System)	212 MW	212 MW
Post-2027 Transmission Addition on Southwest Transmission System	72 MW	72 MW
Reduction due to transmission losses on Southwest Transmission System	-17 MW	-17 MW
Eland I Solar and Storage Project ¹	25 MW	25 MW
Magnolia Power Plant	35 MW	35 MW
Grayson Unit 9	48 MW	48 MW
<i>Scholl Canyon Biogas</i>	<i>11 MW</i>	<i>11 MW</i>
<i>Battery Energy Storage System (BESS) contribution for peak load²</i>	<i>75 MW</i>	<i>75 MW</i>
<i>Grayson Wartsila engines</i>	<i>93 MW</i> <i>(5 engines)</i>	<i>56 MW</i> <i>(3 engines)</i>
<i>Local new DER (2019 IRP contemplated 50 MW of DER; of this, 3 MW have materialized; the 25.25 MW Sunrun VPP proposal has been withdrawn. The 2022 DER RFP seeks additional DER resources.)³</i>	<i>50 MW</i>	<i>25 MW</i>
Total	604 MW	542 MW

As mentioned in the August 2022 report to Council, when assuming all resources are implemented, available, and operating at maximum capacity at the same time, there appears to be a margin of 42 MW when taking the difference between the “Original

¹ The full 25 MW capacity was assumed for this analysis; actual performance may be less as generation capacity varies with time of day and the state of charge of the battery component.

² This is a 4-hour energy limited resource.

³ There are limits as to time of day and/or number of times these resources can be called upon.

Capacity” column total and the 2019 IRP Model total, that is 604 MW – 562 MW = 42 MW. However, that is not an accurate depiction of the available resources, but rather a best-case evaluation. It assumes all resources are maximally available at the same time as the peak load. Not all resources are available around the clock; for example, solar is time-limited (only available during day), batteries, energy demand response, and some resources such as Eland are energy-limited (finite capacity) or can only be called on for a limited time. Additionally, existing transmission is regularly derated or just not available during peak load events, as transmission lines reach their thermal limits and balancing authorities hold on to available capacity in preparation for worsening conditions.

When reviewing GWP’s current capacity in comparison to either our 2019 IRP model or the new model totals, that of 542-562 and 542-620, we see that Glendale is short capacity by -20 MW and -78 MW respectively. This means that in both model scenarios, GWP would be unable to meet our system obligations or our customer obligations at peak load. As confirmed by LADWP, the balancing authority, GWP would need to reduce or shed load in real-time to maintain reserve capacity for the N-1 and N-1-1 contingencies. Controlled shedding of load to meet our system obligation means rolling blackouts.

Energy

In addition to having sufficient capacity (MW), GWP is required to provide sufficient energy (MWh) to serve Glendale. GWP performed an hourly evaluation of the City’s energy needs, considering: (1) the varying energy demand for each hour, (2) how much power and energy each resource can provide; and (3) when each resource can provide energy. As a viable example, the table below represents the theoretical energy provided or consumed by each resource using the actual load data from our historical peak load day, when 346 MW of capacity was needed, and the total energy demand was 5,654 MWh⁴. This data was used because it matches the forecasted peak load day for 2027 used in the 2019 IRP. The analysis also factors in the loss of GWP’s two largest resources, the Pacific DC and half of the STS transmission lines. These transmission lines are Glendale’s N-1 and N-1-1 contingencies. This does not mean that the Wartsila engines would be in constant operation; rather the Wartsila engines are designed to be available as reserve capacity in the event the N-1 or N-1 and N-1-1 contingencies occur. In this event, Grayson Unit 9 and the Wartsila engines would operate to provide adequate power for Glendale. In the scenarios below, local thermal resources – Unit 9 and the Wartsila engines – would be dispatched only as needed to serve load and charge the battery.

Resource	Original Energy MWh	Current Energy MWh
Existing Transmission (100 MW Pacific DC, 112 MW Southwest Transmission System; 212 MW each hour for 24 hours)	5,088	5,088
Post-2027 Transmission Addition on Southwest Transmission System (72 MW each hour for 24 hours)	1,728	1,728

⁴ The MW and MWh values are actual values from August 31, 2017.

Resource	Original Energy MWh	Current Energy MWh
Reduction due to transmission losses on Southwest Transmission System (losses are 5.86%; ~16.7 MW each hour for 24 hours)	-400	-400
Loss of N-1 (Pacific DC Intertie; 100 MW each hour for 24 hours)	-2,400	-2,400
Loss of N-1-1 (Southern Transmission System; 64 MW each hour for 24 hours)	-1,536	-1,536
Reduction in Transmission Losses (~9.6 MW each hour for 24 hours)	231	231
Eland I Solar and Storage Project (25 MW at ~60% Capacity Factor [CF])	358	358
Local new DER (2019 IRP contemplated 50 MW of DER; as of 2022, 3 MW have materialized; the 25.25 MW Sunrun VPP proposal was withdrawn. The 2022 DER RFP seeks additional DER resources. Current column assumes 15 MW of a standard solar array profile [~75 MWh] and 10 MW of demand response for 4 hours [40 MWh]) ⁵	183	115
Magnolia Power Plant (35 MW each hour for 24 hours)	840	840
Grayson Unit 9	865	860
Scholl Canyon Biogas (11 MW each hour for 24 hours)	264	264
BESS Charging Energy (300 MWh with losses)	-353	-353
BESS contribution for peak load ⁶	300	300
Grayson Wartsila engines (Original: 5; Current: 3)	485	559
Total	5,653	5,654

On GWP’s historical peak load day, it delivered 5,654 MWh of energy. As shown in the table above, with the 2027 resources in place, the “Original Energy” column shows that GWP would have 5,653 MWh of energy, meeting (with rounding error) the energy required on the peak load day with five Wartsila engines available.

The “Current Energy” column reflects a three (3) Wartsila engine installation at Grayson, has the Sunrun Virtual Power Plant (VPP) project removed, and assumes the remaining 25 MW of DER (15 MW of a standard solar array profile [~75 MWh] and 10 MW of

⁵ There are limits as to time of day and/or number of times these resources can be called upon.

⁶ This is a 4-hour energy limited resource.

demand response over 4 hours [40 MWh]) will be fully realized. With this “Current Energy” scenario in place for GWP’s historical peak load day, GWP would have met the energy requirement by having the Wartsila engines generate an additional 80 MWh. For this scenario, of the 19 total hours that the Grayson Unit 9 is on during that day, 15-16 hours would be at maximum output. For the three Wartsila engines, of the 12 total hours they are running during that day, 8-9 hours of it are spent with all three at maximum output.

It is important to recognize that although the numbers show that under both the five and three Wartsila scenarios, it is hypothetically possible for GWP to supply the energy required, it comes with the following factors:

- There will be a significant increase in use of the three Wartsila engines which increases the risk of exceeding defined permit limitations (i.e., as permitted, each engine is limited to 50 starts and 225 hours in any month, and 280 starts and 1,120 hours in a year. 1,120 full power hours are equivalent to a 12.8% capacity factor.). It is reasonable to assume that with the limited internal resources available to GWP over the course of the year, GWP would reach the permit limit before the end of a calendar year.
- These current scenarios only consider the historical peak load day of 346 MW, and do not reflect the forecasted peak load day of 456 MW in 2027, identified in the “loss of load model” being developed for the 2024 IRP.
- From an operational perspective, these scenarios were developed with the full knowledge of how the loads would look in advance, allowing for the most efficient dispatching of the available resources. However, real-time operation relies on forecasted conditions and experience, in which an operator must keep some resources in reserve to plan for the possibility of an N-1 or N-1-1 event. The condition that describes the most current N-1 and N-1-1 event for an operator can shift hourly.

Recognizing the very real possibility of a +450 MW peak load day by 2027 as is identified in Ascend Analytics model, emphasizes Glendale’s need for additional in-system resources to provide back-up support (reserves) for any variable resource programs that are implemented.

Grayson Repowering Project

Grayson provides a vital source of local generation to provide power when demand exceeds the combined capacity of local rooftop solar, demand response, energy efficiency, and GWP’s limited transmission imports. Grayson also provides the power needed to cope with contingencies and maintain reserves. It has become critical to take action to modernize Grayson in order for GWP to continue to supply reliable electricity and bridge the gap to the City’s transition to 100% renewables.

Air Quality Regulatory Constraints

Rule 1135 air quality regulations establish deadlines for the repowering of the Grayson Power Plant by December 31, 2023, or GWP will need to shut down any units that do not meet South Coast Air Quality Management District (SCAQMD) Rule 1135 air quality

standards that will then come into force.⁷ By December 31, 2022 – this month – the City must deliver to the SCAQMD the City’s written plan to bring the power plant into compliance with the new air quality requirements⁸.

Background and Next Steps

The City Council, GWP Commission, and City staff have been engaged in a lengthy process of analysis, development work, and exploration of alternatives to replace Grayson, including:

- 2015 Integrated Resource Plan adopted, recommending 262 MW Repower Project
- 2016-2022 Environmental Impact Report preparation and project development
- 2018 Initial Hearing on Environmental Impact Report
Clean Energy RFP issued; proposals modeled; interim IRP adopted
- 2019 Integrated Resource Plan adopted, recommending new portfolio including more clean energy resources, 93 MW Wartsila Engines and Tesla Batteries
Negotiation of new Clean Energy contracts
Council authorizes Limited Notice to Proceed with Wartsila & Tesla
- 2020 City Council authorizes study of additional Grayson EIR alternatives
- 2021 100% Clean by 2030 Study completed and presented
- 2022 Final Environmental Impact Report certified
2022 Clean Distributed Energy Resource RFP issued
EcoMotion retained to consult on RFP and Clean Energy options

On February 15, 2022, the City Council certified the Final Environmental Impact Report for the Grayson Repowering Project. On the same day, the City Council approved Project Alternative 7 which would demolish and replace existing Grayson Power Plant Units 1 through 8 to be replaced with a 75 Megawatt (MW)/ 300 Megawatt-hour (MWh) Tesla Battery Energy Storage System (“BESS”) and five Wartsila Reciprocating Internal Combustion Engines producing 93 Megawatts (MW). Alternative 7 also adds a new Glendale Switching Station and related improvements to the Grayson Power Plant Site.

On March 1, 2022, the City Council modified Grayson Project Alternative 7, directing staff to hold off on procuring the five Wartsila Engines but to proceed with all other aspects of the project, including making the site ready for up to five Wartsila engines. Council also directed staff to return to City Council no later than the end of December 2022 for a decision regarding the procurement of the Wartsila engines.

At the March 1, 2022, City Council meeting, Councilmembers recommended that Glendale meet with the City of Los Angeles/ Los Angeles Department of Water & Power (LADWP) to determine whether LADWP might be able to supply Glendale with 100 MW of reserve power, in order for Glendale to completely avoid or reduce the number of Wartsila engines needed.

⁷ Modifying Units 1-5 to comply with the new air emissions requirements is infeasible. Modifying Units 8A and 8BC would require a major project- replacement of the Heat Recovery System Generator (HRSG). Unit 9 can be modified to meet the new air emissions requirements.

⁸ The December 31, 2022, date reflects a six-month extension the City already obtained. All other generators were required to submit their plans by June 30, 2022.

On March 21, 2022, two Councilmembers, the City Manager and GWP's General Manager, met with LADWP senior representatives and a member of the Board of Los Angeles Water and Power Commission to discuss the amount of reserves that GWP must carry (N-1, N-1-1) and the possibility of LADWP providing power and/or reserves to Glendale to help GWP avoid the need to repower the Grayson Power Plant. LADWP confirmed during the meeting and in a follow up written communication that 1) LADWP does not have 100 MW of capacity available to provide to Glendale, and that 2) GWP must maintain adequate reserves at all times (except during the first 60 minutes of a contingency event) to cover GWP's N-1 and N-1-1 reserve obligations -- even if that means turning off power to Glendale customers.

Since the March 2022 meeting, GWP and LADWP have continued to meet on a bi-weekly basis to identify and collaborate on longer-term initiatives such as LADWP Strategic Transmission Plan and opportunities for future joint transmission and/or generation projects which would be implemented over a much longer time horizon, i.e., 20+ years. However, LADWP's position -- that it is unable to sell reserves or energy to Glendale to meet Glendale's reserve obligations -- has not changed.

At the August 16, 2022, City Council meeting, Council passed a resolution authorizing the GWP General Manager to utilize an alternative project delivery method for the engineering, procurement, and construction of the balance of site work for the Grayson Repowering Project. Council also passed a resolution rejecting the sole bid process related to the Unit 9 Separation bid specification, dispensing with further competitive bidding, and authorizing the City Manager to negotiate and execute a contract with ARB, Inc. The Council also adopted a motion authorizing the City Manager to execute a Professional Service Agreement with Wartsila North America and authorized a Phase 2 Limited Notice to Proceed engineering services for three Wartsila engines. The Council also authorized the City Manager to execute amendments to professional service agreements with Stantec Consulting Services, Inc., Black & Veatch, and Clean Power Consulting Partners for ongoing services related to the Grayson Repower Project, and adopted a resolution of appropriation to fund same.

This update is provided to implement the City Council's direction and seek approval of various contracts, amendments, and procurement methodologies described in this report, in order to implement the City Council's direction regarding the Grayson Repowering Project.

ANALYSIS

Grayson Repowering Project Update

On March 1, 2022, the City Council adopted a resolution directing City staff to proceed with aspects of the Grayson Repowering Project (Modified Alternative 7) and directed staff to return to the City Council before the end of 2022 for a decision regarding the purchase of Wartsila engines.

Update on Procurement of the Tesla, Inc. Battery Energy Storage System

In 2019, the City Council authorized the GWP to commence negotiations with Tesla for the Engineer, Procure, Construct (EPC) contract for the supply, delivery, installation, and commissioning of a 50 MW/ 200 MWh Battery Energy Storage System (BESS). Subsequently the parties were to negotiate and finalize the terms of the Long-Term

Maintenance Agreement (LTSA)/Capacity Maintenance Agreement (CWA) to provide preventative and corrective maintenance services and furnish spare parts as needed with the CMA required to maintain full capacity over the 20-year life.

On June 25, 2022, Tesla provided updated indicative pricing for the EPC contract (50 MW/ 200 MWh BESS) of approximately \$115 million. This was a 45% increase over the indicative pricing of approximately \$79 million that was provided in December 2021. The ongoing price increases arose out of significant supply chain and cost escalation issues occurring for battery and electrical projects at this time, including significant escalation in Lithium pricing over the past several years.

In late June, Tesla notified staff that Tesla is no longer offering energy capacity maintenance contracts due to continuing significant escalation in lithium pricing. That is, the 200 MWh system capacity will not be maintained at 200 MWh for the 20-year contract term and that capacity will degrade over time. In the future, as the batteries degrade, the City will need to purchase additional modules to maintain the original project capacity. These modules would either be installed in planned spare space in the Megapacks or would replace existing heavily used modules.

For the past few months, the City and Tesla have discussed terms related to the EPC and LTSA, but were not able to come to an agreement. Among others the primary issues of difference, in addition to the issues raised above, include: (1) the timeframe between the EPC contract execution and the equipment delivery / project completion necessary to meet the project schedule; (2) a variable price adjustment based on lithium pricing; (3) vendor request for a bilateral indemnification; and (4) the City's bonding requirements which are set pursuant to California State law and required for public works contracts. Other terms upon which the parties could not agree included vendor provisions for choice of law and arbitration of disputes based in Texas.

As a result, the parties have terminated negotiations and staff is now seeking City Council's authorization to include procurement and installation of a BESS as part of the Balance of Site (BOS) EPC Contractors scope. The BOS EPC Contractor will have a BESS specification with which they must comply but will be free to offer a Tesla or other competing system meeting the City's specifications. The BOS EPC RFP is expected to be issued in January 2023.

Phase 2 LNTP Contract for Wartsila Engines

Per the City Council's direction not to move forward at this time with the purchase of the Wartsila engines, the Wartsila contract work will be segregated into two agreements: (1) A "Phase 2 Limited Notice to Proceed" (LNTP) contract for further engineering work to prepare for the three Wartsila engines; and (2) An "Engineer, Procure, Construct" contract for final engineering work, procurement, construction, and commissioning of the Wartsila Power Island.⁹ Negotiation of the latter contract, and all procurement activities for the Wartsila power island and the Full Notice to Proceed, are on hold pending the City Council's decision regarding the installation and number of Wartsila engines.

⁹ The City Council authorized the use of an Alternative Project Delivery Method for both the Tesla and Wartsila Engineer, Procure, and Construct Contracts and the Long-Term Service Agreements on July 23, 2019.

GWP and Wartsila have negotiated a contract for a “Phase 2 LNTP” professional services agreement that would provide GWP with design drawings for the Wartsila foundations and associated piles for a three-engine power island that are ready for “Issued for Construction” for an amount not to exceed \$9,882,000. The proposal includes the necessary engineering work to achieve 60% design completion which is the point in the Wartsila design process where the foundation design will be ready to be issued for construction. The “Limited Notice to Proceed” design process will take fifteen months to complete. This effort started in earnest at the beginning of November. The general arrangement, basic electrical distribution design, and seismic design requirements have been finalized.

On August 16, 2022, Staff recommended, and the City Council authorized a contract with Wartsila for the Phase 2 LNTP professional services agreement so that the work of preparing the design package for the Wartsila power island can begin per the Council’s direction. A reserve for contingencies in the amount of \$988,200 (10% of the contract price) is recommended to address any design changes that may arise.

It is important to note that the design package that Wartsila will prepare under the Phase 2 LNTP Agreement is premised on a three-engine power island. A change in the project from a 3-engine project to a project with a different number of engines could potentially require rework design services not included in the contract¹⁰. The cost and schedule impact of any such additional design work, if a different number of engines are selected, is unknown at this time.

Air Permits and Emissions Reduction Credits for Five Wartsila Engines

The City has submitted an air permit application to the South Coast Air Quality Management District (SCAQMD) for the five Wartsila engines and the application has been reviewed by SCAQMD air permitting engineers. GWP awaits the SCAQMD’s decision regarding the emissions reduction credits needed for the project which is pending the City’s decision on the final number of engines.

Financing

As discussed with the City Council on March 1, 2022, a decision regarding the procurement of the Wartsila engines is needed in order to obtain bond financing to fund the Grayson Repower Project. Recently rising interest rates are expected to impact the cost of the financing for the project.

Southern California Gas Company Collective Work Authorization

As part of the Grayson Repowering Project, the Southern California Gas Co. (SoCalGas) will need to perform work on their system which currently serves the Grayson Power Plant. This work includes decommissioning and removal of equipment, and the installation and commissioning of a new single-meter set assembly to serve the entire plant. Phase 1 of this work will consist of decommissioning, removal of equipment, engineering research, analysis, and design. Phase 2 will consist of construction. Each phase will require a separate SoCalGas Collective Work Authorization (CWA) to proceed. The Engineer’s cost estimate for Phase 1 is \$400,000. Funds for Phase 1 have been appropriated and available from the GWP

¹⁰ A change in the number of engines would require modifying the drawings to indicate what should still be built, and some features would need to be re-sized or re-located.

Electric Depreciation Fund. The cost estimate for Phase 2 will depend on the results of Phase 1. Staff is recommending City Council to authorize the City Manager to execute a SoCalGas CWA for Phase 1 of the work for an amount not to exceed \$400,000.

Conclusion

As directed by the City Council, staff has proceeded to implement all aspects of the Grayson Repowering Project except for procurement of Wartsila Engines. Staff requests that the City Council approve the contracts, amendments, and procurement actions recommended herein to further the development of the project and note and file this report regarding the status of the Grayson Repowering Project and energy procurement efforts. Also included for Council consideration is a motion directing staff to prepare the necessary actions and approvals for Council consideration to authorize the purchase and installation of the five Wartsila engines.

STAKEHOLDERS/OUTREACH

The City obtained comments and input from the public regarding the Grayson Repowering Project through the Environmental Impact Report process and through public and community meetings, including City Council and Commission meetings. GWP continues to present updates regarding the Grayson Repowering Project and its Clean Energy initiatives to the Glendale Water & Power Commission. The Glendale Water & Power Commission has prepared and transmitted a letter to the City Councilmembers with recommendations regarding the Grayson Repowering Project, and a copy of that letter is attached to this Report as Exhibit 2.

FISCAL IMPACT

GWP anticipates that the Grayson Repowering Project will be funded through bond issuances. On July 19, 2016 and July 23, 2019, the City Council adopted Bond Reimbursement Resolutions (Reso 16-129 and Reso 19-94 respectively) which allow the City to recoup expenditures made for the Grayson Repowering Project development from bond proceeds, if and when bonds are issued for the project.

ENVIRONMENTAL REVIEW

The Final Environmental Impact Report (EIR) for the Grayson Repowering Project was certified on February 15, 2022.

This report providing updates on the Grayson Repower, power supply planning, and on various clean energy programs is exempt from the requirements of the California Environmental Quality Act (CEQA) as it will not have a direct physical change or reasonably foreseeable indirect physical change in the environment. Cal. Public Resources Code Section 21065.

CAMPAIGN DISCLOSURE

The names and business addresses of the members of the boards of directors, the chairpersons, CEO, COO, CFO, Subcontractors and any person or entity with more than 10% interest in the companies proposed for contract in this Agenda Item Report are attached in Exhibit 3, in accordance with City Ordinance No. 5744.

ALTERNATIVES

Alternative 1: Adopt the Motions and Resolutions as recommended herein.

Alternative 2: Do not Adopt the Motions and Resolutions as recommended herein.

Alternative 3: Consider any other alternative or adopt a Motion providing direction to staff with regard to the subject matter of this report.

ADMINISTRATIVE ACTION

Prepared by:

Scott K. Mellon, P.E., Assistant General Manager – Power Management

Dorine Martirosian, Principal Assistant City Attorney

Approved by:

Roubik R. Golanian, P.E., City Manager

EXHIBITS / ATTACHMENTS

Exhibit 1: Project Chronology and Schedule.

Exhibit 2: GWP Commission letter to Glendale City Council dated June 6, 2022

Exhibit 3: Campaign Finance Disclosure for Wartsila North America, Inc.