



February 27, 2022

Glendale City Council
RE: Grayson Repowering Proposal

Dear Mayor Devine and Councilmembers Agajanian, Brotman, Kassakhian, and Najarian,

This letter responds to the Staff Report for the Grayson Repowering Project agenda item for the City Council meeting on March 1, 2022. Staff has stated a clear preference for immediately proceeding with the Alternative 7 project option, with all five Wartsila internal combustion engine (ICE) units. The Staff Report advocates for that position, rather than presenting an objective assessment of the positives and negatives of deferring the decision on the ICE units versus proceeding immediately with this large capital project with a \$260 million price tag.

As two brief examples of the advocacy nature of the Staff Report, its discussion of bond financing refers to a risk of interest rates increasing, but does not mention the also very real possibility that bond interest rates could decline, and in discussing Emissions Reduction Credits, it mentions the potential that they may be sold at some loss, while not mentioning that there is also potential that they could be sold at a profit.

Because the Staff Report does not give an objective presentation of facts allowing Council members to weigh pros and cons, Council must think critically, seek out other information and perspectives, and come to their own decision about Glendale's energy future. This letter offers a different perspective on several of the points in the Staff Report.

1. Three summers without local generation—*This is not an increase from the current project schedule.*

According to the Staff Report, delaying a decision whether to purchase the Wartsila engines will lead to three summers without local gas power at Grayson (other than Unit 9).¹

- The current project timeline already would involve three summers with only Unit 9 for local gas generation:
 - GWP's timeline as presented on Feb. 15:
 - November 2022: Units 1-8 are shut down and Unit 9 separation begins
 - December 2025: New Wartsila generation comes online

¹ Staff Report page 4 (under "Reliability" point); page 7 (under "Reserves" point); page 8 (under "Reliability Impacts" point).

- Under this timeline for the Alternative 7 project (without delays), local gas generation (other than Unit 9) would not be available in summer 2023, summer 2024, or summer 2025.
- The current schedule would bring the Wartsila units online in winter, at the end of 2025, and they won't be needed until the summer peak season of 2026. This creates a buffer of several months that can be used to look further into whether Glendale truly needs the five Wartsila units, with the goal of having them online by summer 2026, if they are in fact needed. This proposal is a reasonable opportunity to take stock and explore other opportunities.

2. Code change risk—A delay of less than one year does not increase this risk substantially beyond the risk that already exists of code changes during this project.

The Staff Report says potential changes to the California Building Code and other codes and standards may lead to additional time and expense.²

- Code changes are always possible, and this risk already exists for this project. Because the proposed delay is less than a year, the risk as a result of the delay is not substantially greater than the risk that already exists.

3. Long-lead items—Information given suggests these can move forward as needed to meet project timeline needs, and can be begun sooner if needed.

The Staff Report identifies two issues related to work that must be done with a long lead time: design work, and procurement of generator step-up (GSU) transformers.³

- For “design of pile and foundation system, engine seismic base isolation system, engines and auxiliary systems, and other ancillary equipment,” the Staff Report does not give information about when this would need to be completed to have new gas units installed in time to provide energy for the summer 2026 peak season, and it does not say how long this work would actually take. It may be that none of this work needs to be started before December 2022. If needed, it can be. In other words, there doesn't appear to be a reason this work couldn't proceed on the schedule staff has already prepared.
- For GSU transformers, the Staff Report does not give information on when these would need to be installed, but given that their purpose is to step up voltage from the Wartsila units, we can assume they need to be installed when those units are ready to begin operation in time for the summer 2026 peak season, which is more than four years from now. They need to be ordered more than a year before they are delivered for installation, but even assuming that installation would take a year, they would not need to be ordered before the start of 2023 (possibly even 2024).

² Staff Report page 4.

³ Staff Report page 4.

4. Wartsila pricing changes—*There’s a good chance that prices will actually decrease with a delay.*

The Staff Report expresses concern that with contract negotiations on hold, there is a risk of “potentially significant pricing changes.”⁴

- The Staff Report doesn’t provide any detail about the likelihood or scope of potential pricing changes, and it doesn’t say whether the potential changes in price could be to Glendale’s benefit. As more jurisdictions look to transition from gas to renewable energy sources, it is likely that demand for gas-generating equipment will decline, and that could be reflected in falling prices. Without more concrete information to show that pricing is likely to increase, speculation about price is not a helpful consideration.

5. Wartsila engineering and related work—*Work can begin on the assumption that five units will be purchased, and potentially with two engines as an alternative.*

According to the Staff Report, the scope of the engineering and design work for the Wartsila engines can’t be defined until the number of engines is known, and engineering work will remain on hold for a decision.⁵

- The goal of Councilmember Brotman’s proposal is to leave Glendale’s options open. That includes not committing yet to new gas-burning equipment, but it also includes taking steps that would enable Glendale to purchase Wartsila units if—after additional investigation—City Council determines they are needed. To keep that option open, initial stages of work could proceed in a way that allows five units to be installed, meaning it can proceed with the assumption that five units will be installed. Also, just as the EIR analyzed two potential options (Alternative 7 and Alternative 8), work could potentially also move forward for an alternative scenario of two units.

6. Driving piles—*This work is slated to happen in 2024, and does not appear to be significantly affected by a delay. If needed, the work should proceed for five engines.*

The Staff Report discusses concerns about the timing of driving piles for the Wartsila engines, which is scheduled to happen at the completion of demolition and site improvement. The Staff Report refers to two choices: hiring a contractor to drive piles at that time, or delaying the pile driving.⁶

- The pile driving should be done at the scheduled time. The current project schedule involves a demolition stage that starts in March 2023 and ends in May 2024, with pile

⁴ Staff Report page 5.

⁵ Staff Report page 5.

⁶ Staff Report page 5.

driving after that. This timing is fully consistent with deferring a decision until the end of 2022, and this does not appear to be an impediment.

- Although it doesn't seem to be an issue, if plans for this work must proceed before the end of December 2022, then the work should proceed as if five engines will be installed. If it's preferable to have Wartsila do that work, Glendale can pursue having Wartsila do it. Engaging a different contractor to complete the work can be a fallback, but given the project schedule, this seems unlikely to be needed.

7. Switching station—*A delay at the end of the project schedule is unlikely, and because the switching station is not essential, a delay is not a substantial concern.*

The Staff Report says that delaying a decision on the Wartsila equipment will delay construction of the Switching Station, which will provide additional resilience to the City's distribution system.⁷

- The Switching Station will be installed at the end of the Repowering Project. Councilmember Brotman's proposal is to delay only a decision on the Wartsila purchase but not the initial stages of the entire project. This means that the end of the project schedule will likely not be delayed much. Even if there is a delay, the Switching Station is not an essential part of the project—it provides additional resilience, and will serve as a partially redundant backup for the Kellogg Switching Station. Put simply, a delay in completing the Switching Station is not a significant consideration.

8. Bond financing impacts—*The concerns noted are mostly not true concerns, and bond impacts are not a sufficient reason to drive this decision.*

According to the Staff Report, pausing a decision on the Wartsila equipment means the bond financing should be done in two separate pieces rather than as a single issuance. The Staff Report recommends a single issuance.⁸

- **Two bond financings:** This isn't a concern, and instead is just the reasoning for why pausing a decision on the Wartsila equipment would mean that two bond issuances would be wiser.
- **Double expense for bond financing:** An increase from \$500,000 to \$1 million is an extremely small portion of the total project cost, and is an expense that is well worthwhile because it gives Glendale an opportunity to save up to \$260 million of the total project cost. To give a sense of the scale, the "double expense" increases the bond expense from 0.13% to 0.25% of the total project cost.
- **Interest rate risk:** The Staff Report implies there's a greater chance that bond interest rates may rise than fall, but in the bond market, rates are as likely to fall as they are to rise. Also, even if interest rates rise, that is a relatively small price to pay for a potentially much larger benefit: If City Council opts not to purchase the Wartsila engines, or

⁷ Staff Report page 5.

⁸ Staff Report page 6.

purchases fewer, then the need for financing will be substantially reduced, meaning greater cost savings.

- **Shorter term for BESS bond:** If the lifetime of the BESS is less than 25 years, there is actually a benefit to financing the BESS over a shorter time period, to avoid needing to continue paying for an asset after its lifetime. A shorter bond term also means less interest paid over the life of the bond. Finally, the COSA that concluded the Repowering would have no impact on rates was misleading. It is simply not possible for Glendale to undertake a \$389 million capital project, with additional bond-related costs, and have no impact on ratepayers.
- **Uncertainty for investors and rating agencies:** Glendale will issue a bond offering for a clearly defined project, and bond investors and rating agencies will make decisions in response to that information. As to the claim that there are governance issues because Glendale has deferred a decision on the gas equipment, that point makes little sense: it is good governance to carefully consider the wisdom of a large capital investment before committing to it.

9. Emission Reduction Credits—*Glendale is not likely to take a loss on any sale of ERCs in the market, and may profit.*

The Staff Report says that if Emissions Reduction Credits (ERCs) are purchased for all five Wartsila units and then less than five units are purchased, the ERCs would be sold on the market, potentially at some loss.⁹

- If Glendale purchases ERCs for five units but decides to install fewer, it can sell the ERCs to other entities in a market transaction. The Staff Report says that this sale could potentially be at some loss, but gives no information about the likelihood that ERC prices would decline. In fact, ERC prices fluctuate and can increase rather than decline especially as the supply is tightening. Moreover, ERCs can be held until the price increases. There is no reason to expect Glendale would experience a loss.

10. Concerns with SCAQMD permit changes for less than five units—*Permit changes are neither needed nor appropriate with fewer units, so these concerns are unfounded.*

The Staff Report states that if City Council elects to purchase less than five Wartsila units, the city would need to permit more hours and starts for each unit, which would require modifying the SCAQMD permit applications, additional air quality analysis, and EPA review with public comment that will cause a six-month schedule impact.¹⁰

- First, this entire point is based on a *false premise* that the city would need to permit more hours and starts for each engine. To the contrary, the entire point of the proposal is to look into Glendale meeting its energy needs with *less* gas capacity. In other words, the

⁹ Staff Report pages 6-7

¹⁰ Staff Report page 7.

goal is to have *fewer* engines and have them run no more hours than if all five engines were installed—not to have fewer engines and have them run *more*. There is *no need* for a permit for additional hours and starts, or for new air quality analysis, because the existing permit application already analyzes the operating profile that any units would adhere to.

- Second, the city must undergo the SCAQMD permitting for any Wartsila units it installs, and that permitting process will involve EPA review and public comment. It's not true that only modifying the permit applications for fewer than five units involves EPA review and public comment. That review will happen no matter what.

11. Reputational and good will impacts—*Glendale's reputation is more at risk from installing gas equipment in the 2020s.*

The Staff Report claims that deferring a decision will have an impact on the willingness of energy and reserve sellers, construction bidders, and bond holders to engage with the city in connection with the Grayson Repowering Project, and points to LADWP's past withdrawal of its offer to sell reserves from the 2018 decision.¹¹

- If Glendale moves forward with this project when serious concerns have been raised about its wisdom—without pursuing potential ways to reduce the capital costs and reduce commitments to fossil fuel infrastructure—its reputation is in jeopardy. Glendale could be known as the last California municipal utility to invest in fossil fuel energy generation, when every new fossil fuel investment will exacerbate an accelerating climate crisis for years to come.

12. LADWP reliability communications—*Glendale should pursue the potential opportunity with LA city officials and should not close the door on this option.*

The Staff Report discusses communications between GWP and LADWP regarding reserve obligations and states that “delaying a decision on the Wartsila engines would mean three summer peak periods with no local dispatchable generation source other than Unit 9.”¹²

- Greater involvement by elected and appointed officials including Los Angeles and Glendale City Council members is called for to move this discussion forward. That can only happen if Glendale's City Council pauses this decision. The point of Councilmember Brotman's proposal is to give an opportunity to explore this and other opportunities to avoid a large fossil fuel investment. Until these efforts are pursued, it makes no sense to use this as a reason to close the door on the opportunity.
- The Grayson Repowering timeline already includes three summer peak periods with only Unit 9 as local gas generation. The proposal for a pause is designed not to increase that.

¹¹ Staff Report page 8

¹² Staff Report page 8.

13. Negotiations with LADWP regarding reserves—*Glendale should not close the door to this option, which is not meant to be a sole solution.*

The Staff Report states that negotiations with LADWP will be lengthy so staff does not recommend deferring a decision about the Wartsila engines.¹³

- LA city officials may be in a position to help Glendale with reserve obligations. As noted above, it makes no sense to close the door on this possibility without investigating the current opportunity. Nobody has suggested that Glendale should entirely walk away from new gas equipment solely in the hope that “LADWP might be willing to supply Glendale’s reserves in perpetuity.” That is a strawman argument that should not discourage City Council from exploring this option, which may become part of a plan that also draws on local and imported clean energy resources, as well as load shifting and demand reduction. Rejecting a potential element of a successful plan because it is not a silver bullet would be unwise.

14. Procurement of 50 MW of additional distributed energy resources—*Clean energy can be a dispatchable resource that can contribute substantially to Glendale’s capacity and energy needs, and there is no need to actually procure 50 MW of clean energy by December 2022.*

The Staff Report states that GWP needs dispatchable energy, which cannot be provided by clean clean energy, that 50 MW of new clean energy programs will not be achievable by December 2022, and that adding 50 MW of additional distributed energy resources (DERs) will not eliminate the need for the five Wartsila engines.¹⁴

- Clean energy can be dispatchable, and advances in this area make this increasingly so. Solar energy is traditionally thought of as variable and use limited, yet adding storage to solar systems allows that energy to be dispatched on demand. Demand response can also be dispatchable—for example, it is a resource that is bid into CAISO energy markets in response to market signals. Claims to the contrary are concerning. It’s vital to keep up with energy technology and policy.
- According to the Staff Report, 50 MW of the Virtual Power Plant would only supply 100 MWh for Glendale. This is for a single day with only one charge cycle for the VPP batteries. That said, the comparison with the average daily energy demand is misleading because that is not relevant to the VPP’s ability to provide capacity for peak demand. The peak demand period is much shorter than an entire day.
- The need for new gas generation has been couched in terms of meeting peak demand plus reserve requirements since before the PR-DEIR was released. Now, only after GEC and others cast doubt on GWP’s justification, GWP has changed course and has begun to focus on the average daily energy demand that GWP provides.

¹³ Staff Report page 9.

¹⁴ Staff Report pages 9-10.

- The Wartsila project is designed to provide peak power, not baseload. If the average daily demand is 2,680 MWh, then the Wartsila engines (providing an annual total of about 118,000 MWh) would provide only 12% of the energy to meet that demand.
- Neither new DER programs nor the Wartsila engines would be “achievable” by December 2022. The point of pursuing new DER programs is to reduce the need for gas generation in Glendale’s longer-term energy plans, not in the short term. While clean energy programs from Franklin, Lime, and Sunrun have been somewhat slow to get to implementation, the pandemic played a part in that slower timeline. Future projects should be achievable more quickly.
- A consultant with clean energy expertise would help improve timelines significantly. An expert consultant with knowledge of current clean energy technology and policies can quickly identify potential for distributed clean energy projects and provide a report in advance of December 2022, to give City Council additional information for its decision. A consultant can map out a plan with concrete goals and timeline, and can shepherd the process of procuring and implementing clean energy programs, leaving staff free to focus on other matters. With a consultant dedicated to the task and responding to a clear timeline, there does not need to be concern about a protracted process.

15. 100% hydrogen engines—*If hydrogen is uncertain as an alternative to gas-burning equipment, those same uncertainties make it unwise to pursue expensive gas-burning equipment in the hope that it can be converted to 100% hydrogen later.*

The Staff Report recommends against relying on the development of 100% hydrogen engines by 2025, noting that they may not be available that year, additional engineering, site preparation, and permitting would be needed, and hydrogen combustion is dependent on hydrogen pipeline permitting and development.¹⁵

- The Staff Report acknowledges concerns GEC has raised before about relying on hydrogen combustion. These same concerns are important reasons to be cautious about investing in gas-burning technology in the hope that it can be converted to run on hydrogen within a reasonable period of time—which would need to be long before 2045, the date the Staff Report says GWP “believes” technology development will allow the Wartsila units to run on hydrogen.

16. Long-duration storage options—*Long-duration storage can be part of a clean energy portfolio without needing to be commercially viable before the end of 2022.*

The Staff Report states that there are no commercially viable, tested long-duration storage technologies on the market and additional technologies are not likely to become commercially viable by the end of 2022, while existing long-duration storage technologies are not suitable within Glendale.¹⁶

¹⁵ Staff Report page 10.

¹⁶ Staff Report page 11.

- Lithium ion based storage can provide longer-duration solutions already, and has been selected in response to a request for proposals for long-duration storage by a group of community choice aggregators. This technology is commercially viable now, and the pace of technological advances suggests that new options may become apparent before the end of this year.
- More to the point, the request to pursue long-duration storage is not an effort to find a single-shot replacement for gas-burning equipment. It may be a sensible part of a diverse portfolio that puts greater emphasis on clean energy and avoids substantial spending on gas generation. Glendale owes itself the chance to look into all of these options, and should not let current challenges of a single technology be a reason to foreclose these options prematurely.

With all these considerations in mind, we hope you will support deferring the decision on purchasing the Wartsila ICE units to provide an opportunity to investigate ways to potentially avoid this large investment in gas equipment. This is an opportunity to take steps forward with clean energy, not to move backward with fossil fuel infrastructure.

Sincerely,

Monica Campagna
Elise Kalfayan
Jane Potelle
Paul Rabinov
Kate Unger

Members of Glendale Environmental Coalition Steering Committee