

## **Grayson Draft Environmental Impact Report** **Frequently Asked Questions**

### ***What is the Grayson Repowering Project?***

The Grayson Power Plant began service in 1941 and now much of its existing infrastructure and equipment is due for replacement. The City of Glendale Department of Water and Power (GWP) is proposing to replace the majority of the existing older power equipment and infrastructure (except for Unit 9) with new, more efficient, and cleaner power generation facilities. The Grayson Power Plant Repowering Project is designed to improve efficiency and reliability, while reducing environmental impacts through reduced air emissions and water usage.

To achieve this goal, the Grayson Repowering Project will replace 235 MW gross (219 MW net) with 278 MW gross (262 MW net) new powering equipment. Total net generation of the repowered facility, including Unit 9, would be 310 megawatts (MW). The Grayson Repowering Project would be located entirely within the existing Grayson Power Plant site.

### ***What are the objectives of the proposed Grayson Repowering Project?***

The objective of the Project is to replace the aged, inefficient, and inflexible generation units with approximately 262 MW net of modern power generation that is efficient, reliable, operationally flexible, capable of balancing incoming renewable energy resources, easily be integrated into the City's existing power system, and necessary to meet the power needs of the City in the event that the City cannot bring in power from external transmission lines.

### ***Why is Glendale Water & Power proposing to repower the Grayson Power Plant?***

The Grayson Power Plant has been faithfully serving the electrical power needs of the City of Glendale since 1941. All of the generating units, except for Unit 9, were built between 1941 and 1977 and are well beyond their useful life. Over time, the equipment has degraded, become less efficient, and become more costly to run and maintain. In the next several years, all units at the Grayson Power Plant (except Unit 9) are expected to face shutdowns and retirements that would result in GWP facing a potential electricity shortage in the early 2020's. In addition, Glendale is constrained in the amount of power it can bring into Glendale through existing transmission capacity to meet its needs.

Additionally, the Project is needed to assist in meeting current and future California Renewables Portfolio Standard (RPS) requirements. By producing reliable energy locally, GWP can reduce the imports of non-renewable energy from outside the City. This allows Glendale to free up its limited transmission capacity to accommodate more renewable energy to assist the City in meeting state RPS requirements.

### ***What are the Benefits of the Proposed Grayson Repowering Project?***

The proposed Grayson Repowering Project will have the following benefits:

- Maintain reliable generating capacity.
- Keep rates affordable for Glendale customers.
- Comply with state regulations regarding renewable energy supplies and greenhouse gas emissions without the need for new transmission lines.
- Allow the City to meet its existing and future electric demands even if Glendale is separated from existing interconnections with the electric grid.
- Replace the aged, unreliable, inefficient, high-maintenance steam boilers with new, efficient, and more environmentally-responsible generation technologies.
- Provide a locally-controlled source of generation to minimize the City's reliance on importing power from remote generation locations outside of the City.
- Support water conservation efforts by eliminating the use of potable (drinking) water for generation purposes.
- Meet the current and future needs of Glendale residents.

***When would the Grayson Repowering Project begin?***

GWP anticipates that demolition work would commence in the second quarter of 2018 and take approximately 9 months. Project construction is estimated to start after demolition is completed in the first quarter of 2019 and take approximately 2 years, with an additional 6 months required for startup and commissioning.

***When would the Grayson Repowering Project be completed?***

The Project is expected to conclude by the fourth quarter of 2020, with commercial operation commencing by the end of the second quarter of 2021.

***How will my electric service be affected during the proposed Grayson Repowering Project?***

Electric service would not be affected during demolition, construction or commissioning of the Project. GWP customers would continue to receive electricity while the Plant undergoes repowering. While repowering activities are underway power would be supplied primarily by generating sources outside of the City and transmitted to Glendale over existing transmission lines. However, because GWP's allotment from these transmission systems may not be sufficient to meet Glendale's power demand on particularly hot days, , Glendale has made arrangements to purchase additional power and transmission capacity from LADWP to supply Glendale with sufficient energy to meet its needs during construction should the need arise. The combination of Unit 9, electrical generation brought in over the existing transmission lines, and temporary power supplies from LADWP will assist GWP in meeting all the City's electrical needs during Project construction.

***If my energy service will not be affected during the Grayson Repowering Project, why is it necessary to proceed with the project at all?***

Existing transmission systems do not have sufficient capacity to meet all of Glendale's needs during hot weather, when the transmission lines can become overloaded and when regional demands for electricity are at their highest. Therefore, relying solely on imported energy to serve Glendale customers' needs is not a viable, long-term solution. Although LADWP has the capacity to backstop Glendale's electrical loads during project construction, LADWP is not able to enter into long term power supply contracts with Glendale, so Glendale cannot rely upon LADWP to meet the needs of Glendale customers in the long term.

***What will happen with the existing infrastructure and materials at the Grayson Power Plant?***

The existing power generation facilities at the Grayson Power Plant will be removed. Materials will be sold or recycled to the extent possible. Concrete will be ground up and used as backfill on the site. Metals will be sold, and any contaminated materials will be contained and disposed of per State and Federal regulations.

***Has GWP looked at alternatives to the proposed Grayson Repowering Project?***

Yes. GWP prepared a Draft Environmental Impact Report (DEIR) which has evaluated the environmental impacts of the proposed Grayson Repowering Project and examined Project alternatives as required by the California Environmental Quality Act (CEQA), the State CEQA Guidelines, and the City of Glendale's local CEQA guidelines. The DEIR categorizes and discusses the potential project-specific and cumulative environmental impacts that may occur if the Project is implemented. DEIRs are informational documents that inform public agency decision makers and the general public of the potential environmental impacts of a proposed project, to identify possible ways to minimize or avoid any potential significant impacts either through mitigation or the adoption of alternatives, and to disclose to the public required agency approvals.

GWP identified and evaluated the following Project alternatives in the Grayson Repowering Project DEIR:

- No project alternative
- Energy storage project alternative
- Alternative energy project alternative
- 150 MW project alternative
- 200 MW project alternative

While these alternatives may be technically feasible, the DEIR analysis found none of them meet the Project objectives as well as the Grayson Repowering Project, and found that most were less cost effective than the Project. While the Project alternatives were chosen because they represent a reasonable range of alternatives that could potentially reduce or avoid the Project's significant environmental effects, some alternatives create new impacts,

while others do not achieve substantial overall reductions in the Project impacts. Based on this analysis, the DEIR identified the Grayson Repowering Project as the environmentally superior alternative.

***What about battery storage?***

One of the Project alternatives analyzed in the DEIR is use of the City's electrical generation and transmission capacity to serve the City's electrical load and charge batteries when excess capacity is available. Under this alternative, energy stored in the batteries would be discharged to serve the electrical load when the electric demand in Glendale exceeds the combined capacity of Unit 9 at Grayson and the electrical imports from the Magnolia Power Plant in Burbank and available transmission. While this alternative has less potential for certain local environmental impacts, the energy storage project alternative would potentially increase distant impacts due to the additional night-time generation needed to charge the batteries, when renewable solar energy is not available. In addition, during the summer season, it is not possible to import enough electricity at night to charge the batteries to serve the daytime load. Therefore, the battery storage alternative does not assure that Glendale will be able to reliably serve its customers at all times.

***Why can't we get all of our energy from renewable energy sources like solar energy or wind power?***

Solar and wind power are intermittent sources of power, meaning the generation fluctuates depending upon whether the sun is shining or the wind is blowing. Solar or wind projects require storage facilities to cover those periods when solar and wind resources cannot generate power. A portion of the energy storage could be located at the Grayson Power Plant, but would mostly require some form of energy storage located outside the City of Glendale. Storage is not a generation source itself and relies upon the storage of excess available electricity that can be used to supply load at times of need.

Distributed solar energy on residential and commercial rooftops is not considered a feasible alternative to the project because the adoption and implementation of solar photovoltaic projects on privately owned property is voluntary and would not ensure a reliable power supply commensurate with the amount of power needed and with the reliability associated with utility-scale projects.

***Why do we need a 262 MW power plant? Why not reduce the size of the power plant?***

The DEIR analyzed a 150 MW project alternative and a 200 MW project alternative. A 150 MW plant and a 200 MW plant were also studied as part of GWP's 2015 Integrated Resource Plan study. Although feasible to develop, neither the 150 MW alternative project nor the 200 MW project would provide sufficient capacity or generate sufficient energy under all required planning scenarios necessary to meet local energy demands and reliability requirements. A 150 MW or 200 MW project would not meet many of the Project objectives or meet them as well as the Project.

***Where can I find a copy of the Draft Environmental Impact Report?***

The Draft Environmental Impact Report is available for review at the City of Glendale Central Library located at 222 E. Harvard Street, Glendale, CA 91205 as well as at the City of Glendale Community Development Department, located at 633 E. Broadway, Room 103, Glendale, CA 91206. The Draft Environmental Impact Report is also available on the City of Glendale Community Development's website at:

<http://www.glendaleca.gov/environmental>.

***How did the City determine what environmental impacts should be studied?***

A Notice of Preparation (NOP) was prepared and circulated between December 20, 2016 and January 20, 2017 to get early comments from public agencies with expertise in the subjects that would be discussed in the DEIR. The topics evaluated in the DEIR were identified based on the City's preparation of an Initial Study and comments received during the NOP review period and public scoping meetings.

***What environmental impacts are studied in the report?***

Through the Initial Study and the comments received during the NOP/public scoping meetings, the City determined that the impacts relating to the following environmental topics could be potentially significant and require an assessment in the DEIR:

- Aesthetics
- Air Quality

- Geology and Soils
- Greenhouse Gases
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Noise
- Traffic and Transportation
- Tribal Cultural Resources

Table 2-4 in the DEIR summarizes each identified impact under each of the environmental topics listed above; the level of significance prior to implementation of mitigation; the mitigation measures that would be required to avoid or reduce the level of impact, and the level of significance after implementation of mitigation measures. Based upon the analysis of each of the impact areas, each of the potential project impacts would be either less than significant without mitigation; or less than significant with mitigation as described in the DEIR. You may view Table 2-4 at <http://glendaleca.gov/home/showdocument?id=39046>

***How can I comment on the Draft Environmental Impact Report?***

Please provide written comments to Erik Krause, Interim Deputy Director of Community Development, City of Glendale Community Development Department, 633 E. Broadway, Room 103, Glendale, California 91206-4386. Comments may be submitted by fax to (818) 240-0392 or email to [ekrause@glendaleca.gov](mailto:ekrause@glendaleca.gov). Written and oral comments may also be made at Community Meetings scheduled for October 16 and October 19, 2017 both to be held at 6pm (see below).

***When is my deadline to submit comments on the Draft Environmental Impact Report?***

Comments must be received prior to the close of the 45-day public review period at 5:00 p.m. on November 3, 2017.

***Will there be any public meetings regarding the Draft Environmental Impact Report?***

Yes. A Community Meeting will take place during a Special GWP Commission Meeting scheduled for October 16, 2017 at 6pm in the Glendale City Council Chambers, located in the Glendale City Hall, 613 E. Broadway, Second Floor, Glendale, CA 91206. A second Community Meeting will take place on October 19, 2017 at 6pm at the Utility Operations Center Training Room, located at 800 Air Way, Glendale, CA 91201

***Where can I get more information about the proposed Grayson Repowering Project?***

The project website, <http://www.Graysonrepowering.com> provides an overview of the project and additional information regarding the history, benefits, relevant documents prepared to date, milestones, calendar and facts about the Grayson Power Plant and the project.