**DATE:** April 04, 2006

**TO:** Salt Lake City Planning Commission

FROM: Marilynn Lewis, Principal Planner

RE: April 12, 2006 Planning Commission Meeting

CASE#: 410 -06-03

COUNCIL DISTRICT: District 2 – Van Turner

APPLICANT: Landfill Energy Systems

STATUS OF APPLICANT: Lessee and Developer

PROJECT LOCATION: Approx. 5950 West California Avenue



**PROJECT/PROPERTY SIZE:** 14-11-400-004-0000 89.26 acres (see

Exhibit x) will be consolidated with 14-11-400-005-0000 193.89 acres. The lots are not within a platted subdivision. The owner has chosen to consolidate the parcels by deed to

provide secure access.

SURROUNDING ZONING DISTRICTS:

**North** - CG (General Commercial) and M-1 (Light Manufacturing)

South - OS (Open Space

**East** - M-1 (Light Manufacturing)

West - OS (Open Space)

SURROUNDING LAND USES:

North – Railroad and automobile liquidation facility

South – Landfill and wildlife habitat

East – Large auto body repair and

Manufacturing,

West - Landfill

#### **REQUESTED ACTION:**

Petition 410-06-03 is a request by Land Energy Systems (the lessee) to develop and operate a landfill gas to renewable energy generator facility at the existing Salt Lake Valley Solid Waste facility (Salt Lake County as the leaser). This project is being escorted by Salt Lake City Public Services' Engineering Division.

#### **PROPOSED USE(S):**

The applicant will construct and operate a renewable energy facility that utilizes the landfill gas, which is the natural by product of the decomposing waste, as fuel to generate power that will be sold to Murray City Power. The applicant is further proposing to combine all of the previously un-platted parcels of land that are owned by Salt Lake Valley Solid Waste, in order to eliminate any perceived issues of the proposed site having obstructed frontage along California Avenue.

#### **APPLICABLE LAND USE REGULATIONS:**

#### Section: 21A.28.020 M-1 – Light Manufacturing Zoning District

The purpose of the M-1 Light Manufacturing Zoning District is to provide appropriate locations for manufacturing, fabrication, processing, packaging, distribution, storage, shipping and other transportation activities contributing to the economic base of the City. In 21A.28.040 Table Of permitted and Conditional Uses For Manufacturing Districts, public/private electric generation facilities are a listed conditional use in this zoning district

#### Section: 21A.34.040.22.C. Airport Influence Zones

The subject property is located within the Airport Influence Zone "C", which denotes exposure to moderate levels of aircraft noise, and specific height restrictions. An Avigation easement will be required for any future development on the subject property with any new building permits.

#### Section: 21A.34.030 T Transitional Overlay District

The purpose of this overlay district is to allow for the redevelopment of certain older residential areas for limited commercial and light industrial uses. **B.2.** The presence of external influences, such as proximity to railroad tracks and incompatible uses, which impact the long-term viability of residential use. The proposed use is permitted as a conditional use in the underlying M-1 Light Industrial Zoning District. **The proposed energy facility is in this overlay.** 

#### Section: 21A.34.070 LO Landfill Overlay District

The purpose of this overlay district is to provide greater control over the locations of both public and private landfills and their design, use, reuse and reclamation, and to provide transitional zones adjacent to landfills facilitating the transition from landfills and landfill-related uses to other types of land uses. **The existing landfill facility is in this overlay.** 

#### Section: 21A.54.010 Conditional Use

A conditional use is a use which has potential adverse impacts upon the immediate neighborhood and the City as a whole. It requires careful review of its location, design, configuration and special impact to determine the desirability of allowing it on a particular site. A petition must be analyzed based the Standards for Conditional Use (A- L).

#### **MASTER PLAN SPECIFICATIONS:**

The area of the subject property is M-1 (Light Industrial) Zoning District. The proposed Northwest Quadrant Community Master Plan was recently funded, and efforts are moving forward to establish required data, committees and timeline for staging the project. However, until a master plan is adopted, land use activities are governed by the land use Zoning Districts that were adopted during the 1995 Citywide Zoning Re-write Process.

#### SUBJECT PROPERTY HISTORY:

The subject parcel, where the energy facility is proposed, was acquired by the Salt Lake Valley Landfill in 1995. Prior to that time the land had been used for agricultural purposes. In 1995 the light industrial zoning designation, as well as the Transitional Overlay was placed on the land to ensure that an incompatible use was not located adjacent to the landfill. The area surrounding the site has been subdivided for industrial uses, established for wildlife habitat, or is used as a part of the railroad transportation corridor.

#### **ACCESS:**

The subject parcel has frontage on California Avenue, but is bisected by a utility corridor. Therefore, vehicular access for the new facility will be from California Avenue through the landfill facility. This will also allow Salt Lake Valley Solid Waste to monitor who comes in and out adding an extra element of security, which has been encouraged by Homeland Security for energy producing facilities to thwart nefarious activity.

#### PROJECT DESCRIPTION:

The applicant is proposing to develop a renewable energy electric generator facility. These types of facilities are allowed by conditional use within the M-1 (Light Manufacturing) Zoning District. The landfill produces methane or landfill gas, which is a natural by-product from the decomposing waste. The gas is not allowed to escape into the atmosphere. Currently it is collected and piped to a flare system that burns the methane at a constant temperature of 1300 degrees Fahrenheit (see photo Exhibit 4).

The landfill gas, which is currently burned off will be piped directly to the generators as a fuel sources to produce electrical power. The self-contained generators will be housed in modular sound attenuated enclosures, as shown in the plans in Exhibit 2. The generators are equipped with smoke and heat detectors; if they sense a fault condition they will automatically stop the engines, shutdown all electrical, isolating them from the main utility line and instantly close the main gas valve. The applicant has submitted a full set of construction documents with the application. Copies of the site plan have been attached in Exhibit 2.

The project was reviewed by the Utah Department of Air Quality (DAQ) and found to be consistent with the requirements of the Utah Administrative Code Rule 307 and an Approval Order was issued. The air quality Approval Order authorizes the project with conditions. A copy of the DAQ Approval Order and the conditions are attached in Exhibit 5.

Once the initial site construction is completed only two Land Energy System's employees will be accessing the site on a regular basis for monitoring. The hours of manned operation will be from 7:00 am to 6:00 pm, the same as the landfill. However, the generators will produce power on a continual basis. The generator site will not be open to the general public.

#### **COMMENTS, ANALYSIS AND FINDINGS:**

#### **PUBLIC COMMENTS**

The applicant attended the March 15, 2006 meeting of the West Salt Lake Community Council. Staff from Planning and Engineering gave a brief overview of the conditional use process and the project. The community asked a few questions about the project and then voted on whether or not to support it. The community members present voted unanimously in favor of supporting the project.

#### CITY DEPARTMENTS AND DIVISIONS

The drawings were routed to all of the pertinent departments and divisions in the City. The responses and comments from the City departments are attached in Exhibits 1.

#### a. Permits Office

The Permits Office reviewed the project at the January 6, 2006 Development Review Team meeting. The recent comments submitted reiterated the need for the combining of parcels, or the creation of a cross-access agreement, as well as coordination with the other City divisions. They have presented no objection to this project.

#### **b.** Public Utilities

Salt Lake City Public Utilities reviewed the project and has no objection to the proposed conditional use to install a power generator on the landfill property which will use landfill gas as the source of energy. However, there is no public water, sewer or storm drainage facilities near this property. The expense of bringing in such utilities could be substantial and would be paid for by the developer (lessee). The discussion at DRT and the plans submitted did not show any need for water, sewer or drainage, therefore, there are no issues for Public Utilities. If the scope of the project changes these issues may need to be addressed by the developer.

#### c. Police Department

The Police Department reviewed the proposed project and determined there were no concerns with this request.

#### d. Engineering

The Engineering Department has reviewed plans for the project, which was initially reviewed at the Development Review Team meeting on January 6<sup>th</sup>, 2006. It was originally determined that there was a need for hard surface in any area that was used for vehicular maneuvering including the first 50'-0" feet after crossing the property line. If the property lines are eliminated and parcels combined then the existing hard surface off of California Avenue would be sufficient in complying with the Clean Wheel Ordinance (Section 18.20.210 of the Revised Ordinances of Salt Lake City, 1987), thus negating the need for any other hard surface maneuvering by Engineering.

#### e. Fire

The Fire Department has reviewed the project and has no objections or concerns.

#### f. Zoning Enforcement

Zoning Enforcement reviewed the proposed project and found no impacts on Housing/Zoning enforcement services.

#### g. Transportation Division

The Division of Transportation review comments and recommendations are as follows: The access is to be provided by the existing un-improved roadway developed by the land fill operations with agreements to combine lots or establish a cross-access easement.

The Transportation Division originally requested that right of way dedications along California Avenue be made for a 42' half width from the monument line for an 84' roadway and development be waved for future improvements.

Per further record reviews by Engineering, it has been verified that the right of way has already been dedicated. With the major partition of the site being undeveloped and no additional access issues are required, Transportation therefore recommends that public way improvement development be waved.

#### h. Airport

The Department of Airports has reviewed the project and has determined that there are no observed conflicts. The Salt Lake City Zoning Ordinance requires that an Avigation Easement be prepared for the new development.

#### ANALYSIS AND FINDINGS

The Planning Commission must make a determination on whether or not the overall concept of the project meets the criteria listed in the zoning ordinance as stated below.

#### 21.54.080 Standards for Conditional Uses.

A. The proposed development is one of the conditional uses specifically listed in this Title.

**Discussion:** In the M-1 (Light Manufacturing) Zoning District the development of a public or private electric generation facility is only permissible through the conditional use process. This type of facility is also required to be within 2,640 feet of an existing 138 kV or larger power transmission line.

**Finding:** The proposed development is a specifically listed conditional use in the M-1 (Light Manufacturing) Zoning District. The project is also located just over 800 feet from the nearest power transmission lines, which are 138 kV and 345 kV.

B. The proposed development is in harmony with the general purposes and intent of this Title and is compatible with and implements the planning goals and objectives of the City, including applicable City master plans.

**Discussion:** The location of the subject property is M-1 (Light Industrial) Zoning District. The subject site is located in the general area known as the Northwest Quadrant, which has no adopted master plan. Funding has been appropriated to prepare a master plan. However, until a master plan is adopted, land use activities are governed by the Land Use Zoning Districts that were adopted during the 1995 Citywide Zoning Re-write Process.

**Finding:** The proposed development is in harmony with the general purposes and intent of this Title and is compatible with and implements the planning goals and

objectives of the City, including the adopted 1995 Zoning Land Use Map. The project is also consistent with the City's policies of energy conservation and sustainable development.

### C. Streets or other means of access to the proposed development are suitable and adequate to carry anticipated traffic and will not materially degrade the service level on the adjacent streets.

**Discussion:** The vehicular ingress/egress for the site is proposed from California Avenue. There is no pedestrian access. California Avenue is a paved road surface. The Division of Transportation has determined that the access to the subject site can be provided by the existing un-improved roadway developed by the landfill if all the lots are combined by deed or a cross-access easement is established.

The Transportation Division also requests that that right of way is dedicated along California Avenue (of the parcel associated with the subject site) for a 42' half width from the monument line for an 84' roadway and development be waved for future improvements. Per further record reviews by Engineering, it has been verified that the right of way has already been dedicated. With the major partition of the site being undeveloped and no additional access issues are required, Transportation therefore recommends that public way improvement development be waved at this time and be subject for future improvements.

**Finding:** The streets and driveways for the proposed development are suitable and adequate to carry anticipated traffic and will not materially degrade the service level on the adjacent streets.

### D. The internal circulation system of the proposed development is properly designed.

**Discussion:** The existing road that would be used for access to the proposed site on the east side of the landfill facility is approximately 18 feet wide and over 2,000 feet in length. The landfill is a dynamic site and frequent changes are made to the facility, as well as the interior site circulation system. Only the area where the public is allowed, for drop off of materials, is hard surfaced with asphalt on concrete.

Likewise, the development of the renewable generation facility is proposed with a gravel base access and interior road system. The gravel road at the new facility will: a.) allow for expansion (addition of more generators) as the landfill expands (and produces more gas), b.) eliminate construction debris at the time of future expansion, c.) the gravel paving is more environmentally sensitive to the surrounding area as far as storm water run-off as compared to a more impervious surface (such as concrete or asphalt).

Therefore, leaving the existing and proposed site access systems as gravel further

reduces the "urban heat island" effect by reducing the amount of paved surface, and allows storm water to percolate through the soil.

**Finding:** The internal circulation system of the proposed development is properly designed.

E. Existing or proposed utility services are adequate for the proposed development and are designed in a manner that will not have an adverse impact on adjacent land uses or resources.

**Discussion:** Salt Lake City Public Utilities has no objection to the proposed conditional use to install a power generator on the landfill property which will use landfill gas as the source of energy. There are no public water, sewer or storm drainage facilities near this property.

If the scope of the project changes these issues may need to be addressed by the developer. The lack of a public water main also means that there is no water available for fire hydrants or traditional fire sprinkling systems. However, water is not typically used on electric generators. In case of an emergency, the engines will automatically stop, shutdown all electrical, isolating them from the main utility line and instantly close the main gas valve.

**Finding:** The existing and proposed utility services are adequate for the proposed development and are designed in a manner that will not have an adverse impact on adjacent land uses or resources.

F. Appropriate buffering is provided to protect adjacent land uses from light, noise and visual impacts.

**Discussion:** The proposed project is an extension of the landfill operations. There will be no impacts to California Avenue or any residential uses.

**Finding:** Therefore, there are no impacts due to visual, light or noise issues and this standard is not applicable.

G. Architecture and building materials are consistent with the development and compatible with the adjacent neighborhood.

**Discussion:** The surrounding area, existing streetscape along California Avenue, as well as the subject site at the landfill, is that of an industrial area.

**Finding:** Architecture and building materials are consistent with the surrounding development and compatible with the adjacent neighborhood.

H. Landscaping is appropriate for the scale of the development.

**Discussion:** The site is virtually undeveloped it has no existing landscaping, buildings or paved areas. The additional use does not require any additional landscaping.

Finding: Therefore, this standard is not applicable.

### I. The proposed development preserves historical architectural and environmental features of the property.

**Discussion:** There are no existing structures in the vicinity other that accessory sheds associated with the landfill gas flume, nor is the subject site located within an historic district. The proposed development will not be located in or disturb any environmental features on this site.

The existing adjacent structures, associated with the neighboring industrial and manufacturing development, are not located in a designated historic district or designated as an individual landmark site. The site does not contain any specific historic or environmental features that will require preservation or mitigation.

**Finding:** The proposed development has no affect on historical architectural or environmental features of the property.

#### J. Operating and delivery hours are compatible with adjacent land uses.

**Discussion:** The main hours of access to the site will be compatible with the landfill. The generators will operate continuously. However, the manned hours of monitoring will be hours from 7:00 am to 6:00 pm, daily.

**Finding:** Operating and delivery hours are compatible with adjacent land uses.

K. The proposed conditional use or, in the case of a planned development, the permitted and conditional uses contained therein, are compatible with the neighborhood surrounding the proposed development and will not have a material net cumulative adverse impact on the neighborhood or the City as a whole.

**Discussion:** The proposed request is for an electric generator facility in the M-1 (Light Manufacturing) Zoning District. There are major transmission power lines all throughout this vicinity. Therefore, this project does not create any cumulative adverse impacts for this commercial area or the City.

**Finding:** The proposed use is compatible with the surrounding neighborhood and the proposed development will not have a material net cumulative adverse impact on the neighborhood or the City as a whole.

### L. The proposed development complies with all other applicable codes and ordinances.

**Discussion:** This project is in an existing industrially zoned district. Comments have been received from other divisions that will need to be addressed prior to the issuance of any new permits or licenses. All pertinent City codes must be met prior to the issuance of a building permit.

**Finding:** The proposed development complies with all other applicable codes and ordinances.

#### **RECOMMENDATION:**

Based on the findings of fact, Staff recommends that the Planning Commission approve this Conditional Use request with the following conditions:

#### **Conditions of Approval**

- 1. The property owner must combine all of the parcels associated with the Landfill by deed. Since frontage along California Avenue was previously dedicated, the Transportation Division is waving future improvements.
- 2. An Avigation Easement will be required for the new development.

Marilynn Lewis, Principal Planner Planning Division

#### **Attachments:**

Exhibit 1 – Comments from City Departments and Development Review Team (DRT)

Exhibit 2 – Proposed Site Plans

Exhibit 3 – Transmission Line Information/ Verification

Exhibit 4 – Photos of Site

Exhibit 5 – Copy of Utah Department of Air Quality Approval Order

# Exhibit 1 Comments from City Departments and Development Review Team (DRT)

# **Exhibit 2 Proposed Site Plans**

## **Exhibit 3 Transmission Line Information/ Verification**

## **Exhibit 4 Photos of the Site**

# Exhibit 5 Copy of Utah Department of Air Quality Approval Order