Scattergood-Olympic

TRANSMISSION LINE

OPEN HOUSE

Welcome

PURPOSE OF THIS OPEN HOUSE

- **Communicate information regarding the Scattergood-Olympic Transmission Line Project**

- **Communicate the California Environmental Quality Act (CEQA) review process**

- **Seek comments and input on the environmental review and siting criteria used for route development**

- **Communicate future and continued opportunities for public participation**

PROJECT OBJECTIVES

- **Comply with a recent federally mandated standard by providing an additional circuit to respond to outages**
- **Enhance reliability and operational flexibility of electric service to the western Los Angeles area**
- **Provide for better utilization of existing Scattergood Generating Station**

PROJECT DESCRIPTION

- **Construct a new underground 230 kV transmission line from Scattergood Generating Station to the Olympic Receiving Station (Substation) placed within roadways**
  - Cables installed within a trench three feet wide and seven to nine feet deep
  - Install prefabricated concrete maintenance vaults (12 to 14 feet wide, 12 feet deep, and 36 to 38 feet long) every 1,500 to 2,200 feet
- **Interconnection improvements at Olympic Receiving and Scattergood Generating Stations**

DEVELOPMENT OF POTENTIAL ROUTES

ENGINEERING SITING CRITERIA

- **Conflicts with existing infrastructure in roadways, including:**
  - Gas pipelines
  - Power lines
  - Water lines
  - Sewer
  - Telecommunications
- **Constructability**
- **Crossings of Ballona and Centinela Creeks**
- **Geologic hazards**
- **Minimize use of state highways**
- **Minimize mileage parallel to existing transmission lines**
- **Minimize construction duration**
- **Reliability**
  - Minimize length and number of bends, splices, and maintenance vaults
- **Street width**

DEVELOPMENT OF POTENTIAL ROUTES

ENVIRONMENTAL SITING CRITERIA

- **Maximize use of roadways**
- **Consideration of sensitive land uses:**
  - Hospitals
  - Licensed child care centers
  - Parks
  - Residential
  - Schools
  - Wetlands/waterways
- **Traffic patterns**

ENVIRONMENTAL IMPACT REPORT

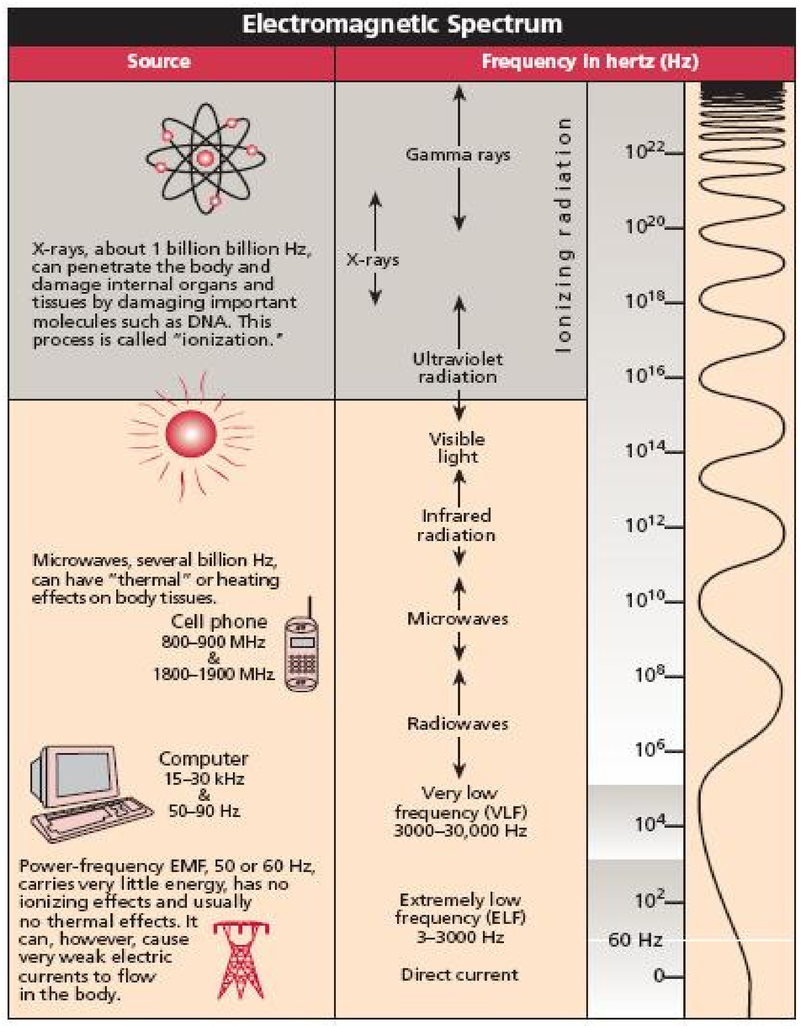
- **Project Description**
- **Impact Analysis**
- **Alternatives**
- **Mitigation and Monitoring Plan**
- **Electric and Magnetic Fields (EMF) Management Plan**
- **Public Involvement**

- **Environmental Factors:**
  - Aesthetics
  - Agriculture and Forestry Resources
  - Air Quality
  - Biological Resources
  - Cultural Resources
  - Geology / Soils
  - Greenhouse Gas Emissions
  - Hazards and Hazardous Materials
  - Hydrology / Water Quality
  - Land Use / Planning
  - Mineral Resources
  - Noise
  - Population / Housing
  - Public Services
  - Recreation
  - Traffic / Transportation
  - Utilities / Service Systems

ELECTRIC AND MAGNETIC FIELDS

Electric and Magnetic Fields (EMF)

- found with anything that generates, transmits, or uses electricity
- usually refers to 60 Hz power frequency fields
- non-ionizing energy source
  (see electromagnetic spectrum figure)
- cannot be seen or heard
- measure magnetic fields in milligauss (mG) or microtesla (μT)



The wavy line at the right illustrates the concept that the higher the frequency, the more rapidly the field varies. The fields do not vary at 0 Hz (direct current) and vary trillions of times per second near the top of the spectrum. Note that 10^4 means 10 x 10 x 10 x 10 or 10,000 Hz. 1 kilohertz (kHz) = 1,000 Hz. 1 megahertz (MHz) = 1,000,000 Hz.

Does EMF Affect Health and Cause Disease?

- Topic of extensive scientific research
  - Epidemiologic, animal, and cellular studies
- Extensive scientific research and review by expert scientific panels does not support a conclusion that magnetic fields cause adverse long-term health effects

EMF Sources

Typical home appliances

(Measurements are in milligauss)

		1.2" away	12" away	39" away
	Microwave oven	750 to 2,000	40 to 80	3 to 8
	Clothes washer	8 to 400	2 to 30	0.1 to 2
	Electric range	60 to 2,000	4 to 40	0.1 to 1
	Fluorescent lamp	400 to 4,000	5 to 20	0.1 to 3
	Hair dryer	60 to 20,000	1 to 70	0.1 to 3
	Television	25 to 500	0.4 to 20	0.1 to 2

Source: Adapted from Gauger 1985

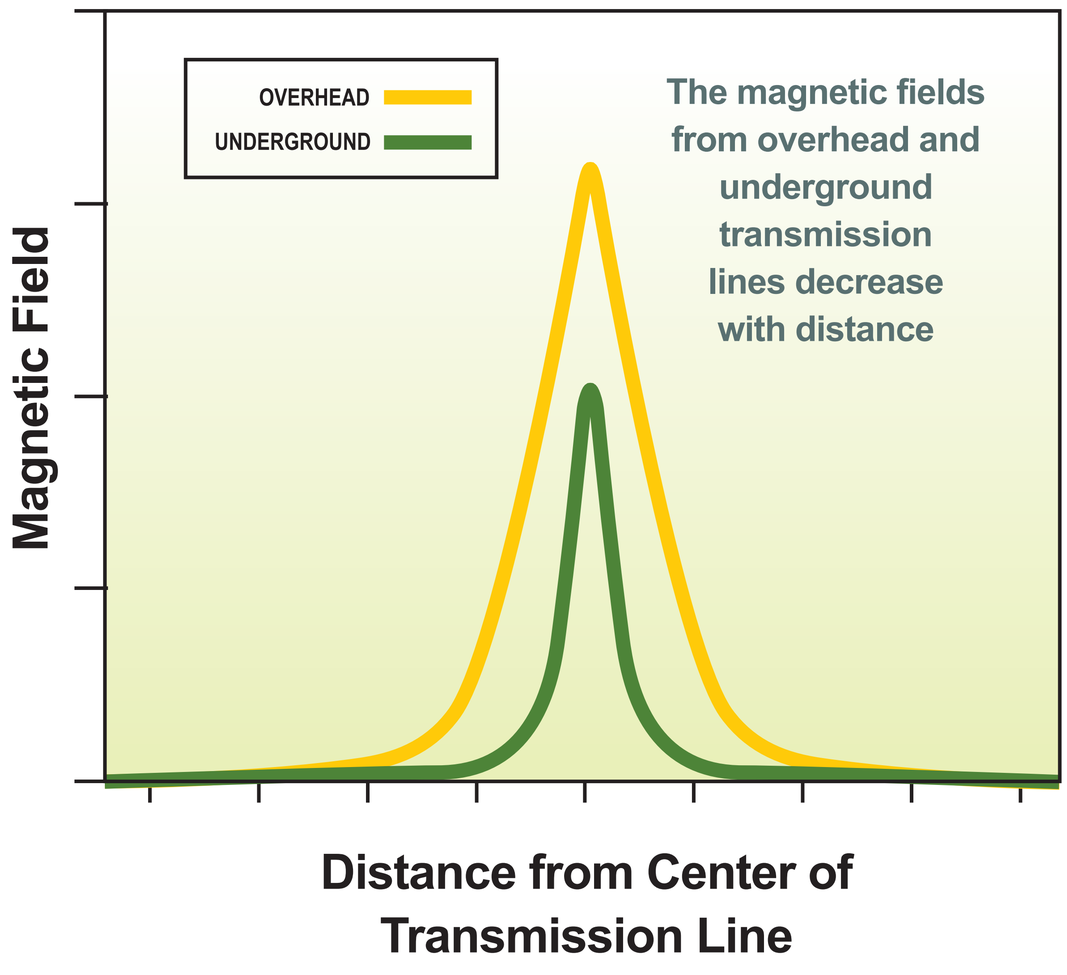
EMF FACTORS TO CONSIDER

Transmission Lines

EMF produced in both underground and overhead transmission lines

EMF reduces more rapidly with distance from centerline with underground compared to overhead line

Underground is more expensive to install, operate, and maintain than overhead



LADWP EMF Design Practices

Prepare EMF Management Plan

- Model EMF exposure
- Design in accordance with Underground Transmission Line Design Standards
  - Cable configurations
  - Trench characteristic
  - Employ “no cost” and “low cost” measures to reduce public exposure

Monitor and report on new EMF-related scientific data

Additional Information Sources

It is best to consult information presented by recognized national and international organizations, such as:

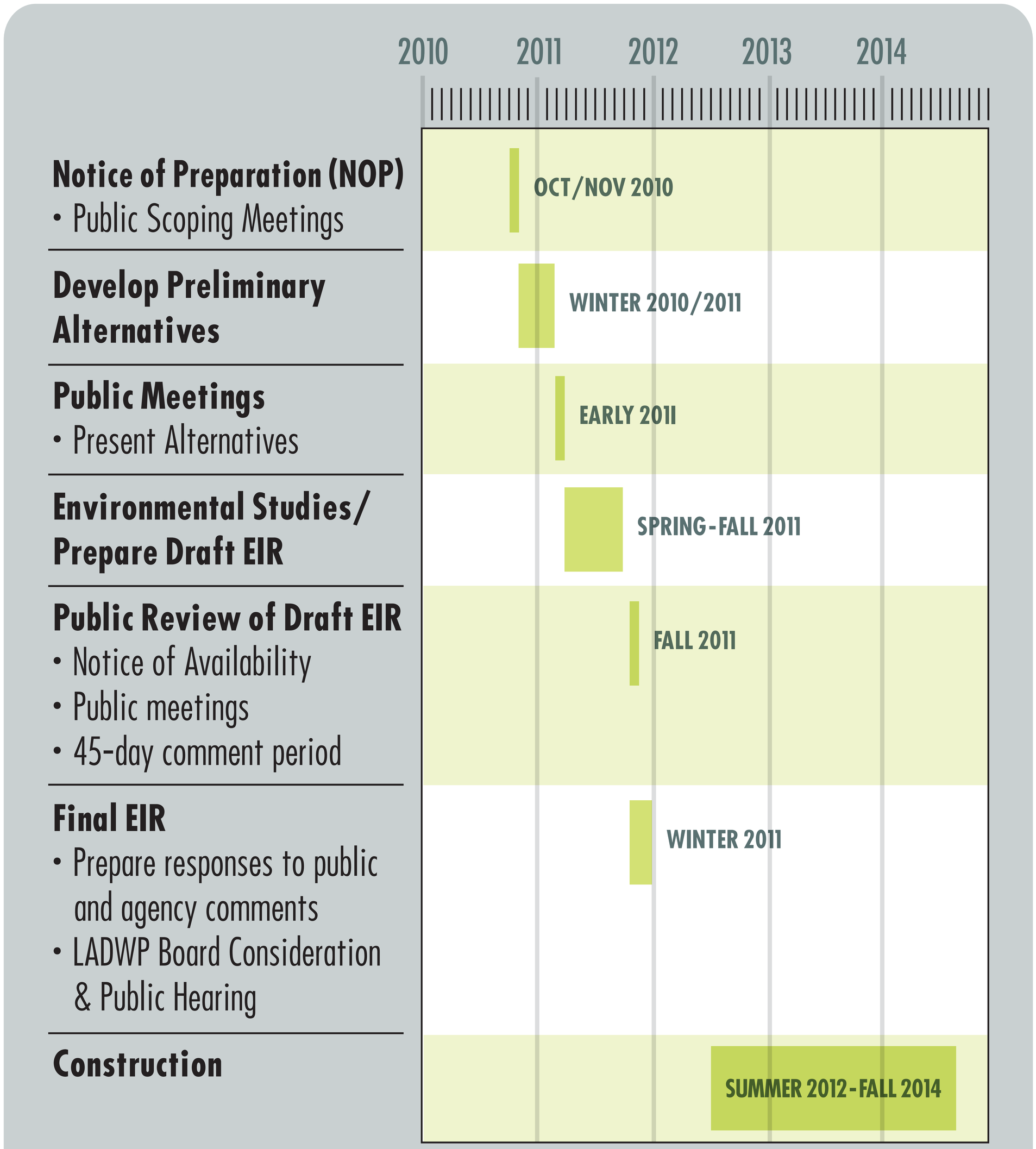
- The World Health Organization—International EMF Project
  www.who.int/peh-emf/en/

- U.S. National Institute of Environmental and Health Sciences (NIEHS)
  www.niehs.nih.gov/health/topics/agents/emf/docs/emf2002.pdf

- National Cancer Institute (NCI)
  www.cancer.gov/cancertopics/factsheet/Risk/magnetic-fields

- California Public Utilities Commission (CPUC)
  www.cpuc.ca.gov/Environment/emf/emfopen.htm

CEQA PROCESS/TIMELINE



LA DWP

Scattergood-Olympic

TRANSMISSION LINE

WE WANT TO HEAR FROM YOU

Please submit comments by ***November 12, 2010***

- **Submit comment form**
- **Visit interactive GIS comment station at today's open house**
- **E-mail: Scattergood-Olympic@ladwp.com**
- **Call: Toll-free (877) 735-8407**
- **Mail to:** Scattergood-Olympic Transmission Line
  Los Angeles Department of Water and Power
  Attn: Julie Van Wagner, Environmental Project Manager
  111 North Hope Street, Room 1044
  Los Angeles, CA 90012

Additional project information may be found on the project website at **www.ladwp.com/Scattergood-Olympic**

PUBLIC PARTICIPATION - NEXT STEPS

Stay Informed

- Visit project website
- Join mailing list to receive project notices and mailings

Project Updates

- Present preliminary alternatives
- Notice of public meetings

Public Meetings

- January / February 2011
- Review routing alternatives

INTERACTIVE

GIS COMMENT STATIONS

Scattergood-Olympic

TRANSMISSION LINE