# ADMINISTRATOR'S RECORD OF DECISION

# **Mint Farm Generation Project**

## INTRODUCTION

The Bonneville Power Administration (BPA) has decided to offer contract terms for integrating power from the proposed Mint Farm Generation 319-megawatt (MW) gasfired, combined-cycle, combustion-turbine power generation project (MFG Project) into the Federal Columbia River Transmission System (FCRTS). This MFG Project, which is located within an industrial park south of the City of Longview, in Cowlitz County, Washington, is one of many proposed generation projects currently being considered for integration into the FCRTS. Power generated at the MFG Project will be available for purchase in the wholesale power market. The West Coast has only recently recovered from a shortfall in electric energy supply and a volatile wholesale power market in which prices reached record highs. The MFG Project will help meet the future need for energy resources and serve as a resource to meet demand in the long term. The decision to offer terms to integrate this MFG Project is consistent with BPA's Business Plan (BP), the Business Plan Environmental Impact Statement (BP EIS) (DOE [Department of Energy]/EIS-0183, June 1995), and the Business Plan Record of Decision (BP ROD) (August 15, 1995). Mitigation for the MFG Project will be taken in accordance with the requirements of the State of Washington's State Environmental Policy Act (SEPA) and regulatory agencies.

## **RELATIONSHIP TO BUSINESS PLAN EIS**

In response to a need for a sound policy to guide its business direction under changing market conditions, BPA explored six alternative plans of action in its BP EIS. The six alternatives were: Status Quo (No Action), BPA Influence, Market-Driven, Maximize Financial Returns, Minimal BPA, and Short-Term Marketing. The BP EIS examined each of these six alternatives as they relate to meeting the regional electric energy need in the dynamic West Coast energy market. The analysis focused on the relationships among BPA, the utility market, and the affected environment. The evaluation, which included transmission as well as generation, compared BPA actions and those of other energy suppliers in the region in meeting that need (BP EIS, section 1.7).

In the BP ROD, the BPA Administrator selected the Market-Driven alternative. Although the Status Quo and the BPA Influence alternatives were the environmentally preferred alternatives, the differences among alternatives in total environmental impacts were relatively small. Other business aspects, including loads and rates, showed greater variation among the alternatives. BPA's ability to meet its public and financial responsibilities would be weakened under the environmentally preferred alternatives.

The Market-Driven alternative strikes a balance between marketing and environmental concerns, including those for transmission-related actions. It also helps BPA to ensure the financial strength necessary to maintain a high level of support for public service benefits, such as energy conservation and fish and wildlife mitigation and recovery activities.

The BP EIS was intended to support a number of decisions (BP EIS, section 1.4.2), including contract terms BPA will offer for transmission services. The BP EIS and ROD documented a strategy for making these subsequent decisions (BP EIS, Figure 1.4-1 and BP ROD, Figure 3, page 15). BPA's decision to offer terms for integrating the MFG Project is one of these subsequent decisions and the subject of this tiered ROD. BPA reviewed the BP EIS to ensure that offering contract terms for transmission services was adequately covered within its scope and that it was appropriate to issue a tiered ROD (BP EIS, section 1.4.1 and BP ROD, page 1). This tiered ROD, which summarizes and incorporates information from the BP EIS, demonstrates this decision is within the scope of the BP EIS and ROD. This ROD describes the specific information applicable to this decision to offer contract terms, and provides a summary of the environmental impacts associated with the decision with reference to appropriate sections of the BP EIS and BP ROD.

This tiered ROD also references information that was incorporated by reference into the BP EIS from BPA's Resource Programs (RP) EIS (DOE/EIS-0162, February 1993). The RP EIS contains an analysis of environmental effects and mitigation for CTs, gas pipelines, and associated transmission. Lastly, this ROD summarizes and references MFG Project information from the State of Washington's SEPA process to clarify where and how the site-specific environmental consequences described in the BP EIS will occur, including mitigation measures to be taken.

#### BACKGROUND

The West Coast has a continuing long-term need for electrical energy resources. The most recent long-term planning estimates by BPA and the Pacific Northwest Electric Power and Conservation Planning Council show the region may need an additional 5,000 to 6,000 MW of electricity over the next 5 years; estimates for the next 10 years run as high as 8,000 MW. The 319-MW MFG Project will help reduce the Northwest energy deficit.

BPA is a major provider of electric transmission services in the Northwest. BPA has adopted the Federal Energy Regulatory Commission's (FERC) *pro forma* open access tariff. Under this tariff and BPA's Open Access Transmission Tariff, after completion of National Environmental Policy Act (NEPA) processes, BPA offers transmission services, including interconnection of generation, to eligible customers on a first-come, first-served basis. Although BPA is not subject to FERC's jurisdiction, BPA follows its tariff as a matter of policy. This course of action demonstrates BPA's commitment to

non-discriminatory access to its transmission system and ensures that BPA will receive non-discriminatory access to the transmission systems of public utilities, which are subject to FERC's jurisdiction.

BPA has prepared two contracts offering terms to Mint Farm Generation LLC (MFG) for integration of the MFG Project. The first, Contract No. 02TX-10786, is a Generation Interconnection Agreement that provides for interconnection of the MFG Project with the FCRTS, the operation of the MFG Project in the BPA Control Area (including control area services such as generation imbalance service), and the maintenance of reliability of the FCRTS and interconnected systems. The second contract, Contract No. 02TX-10787, is a Construction, Operation, and Maintenance Agreement for engineering, procurement, and construction of the interconnection facilities; for interconnection with the FCRTS; and for operation and maintenance. The planned interconnection facilities' commercial operation date is before February 1, 2003.

## **DESCRIPTION OF THE MINT FARM PROJECT**

MFG, a wholly owned subsidiary of Mirant Corporation (Mirant), proposes to construct and operate a 319-MW natural-gas-fired, combined-cycle, combustion turbine (CT) power generation plant. The MFG facility will be located within the Mint Farm Industrial Park (MFIP), in the City of Longview, Washington. The facility would be constructed on approximately 10 acres of land purchased from the City of Longview. The MFG facility will burn natural gas in a CT driving an electric generator. The CT exhaust will flow to a waste-heat boiler generating high-pressure steam to drive a steam turbine and second electric generator. The gas turbine will use a low-emissions combustor and a selective catalytic reduction system will be installed to further reduce nitrogen oxide (NO<sub>x</sub>) emissions. Catalytic oxidation will be employed to reduce carbon monoxide (CO). Natural gas will be supplied by a new, approximately one-mile-long extension of an existing Cascade Natural Gas Corporation (CNG) pipeline lateral. The pipeline will be constructed and owned by CNG.

Based on Washington's Expanded SEPA Checklist, Cowlitz County issued a Mitigated Determination of Non-Significance (MDNS) for MFG Project's originally proposed 248-MW generating facility on January 26, 2001. The original MFG Project was to be constructed as a gas-fired 248-MW combined-cycle generation facility, including the gas-fired turbine, heat recovery steam generator (HRSG), steam turbine, and evaporative cooling towers. The MFG Project was issued an Order of Approval (No. 01-2342) by the Southwest Clean Air Agency (SWCAA) to operate in this configuration on June 4, 2001. This issued air permit was based on the information presented in the proponent's Notice of Construction (NOC) No. CO-689 submitted in November 2000.

Subsequently, on December 7, 2001, MFG submitted an amended application to SWCAA for approval of changes in the design and operation of the MFG facility. Included in the amended application are plans to increase the generating plant's

capacity to 319 MW. The increase in generating capacity is primarily achieved through the addition of supplemental firing in a set of duct burners installed in the HRSG. Some additional capacity will be generated through the occasional use of "power augmentation" (the addition of steam into the CT combustor). Also proposed are a natural-gas-fired fuel preheater and an emergency diesel generator. The amended application represents a request by MFG for an amendment of the existing air permit to allow the installation and operation of the duct burners, the fuel preheater, and the emergency generator. The CT and duct burners will fire only natural gas, as will the fuel preheater. The emergency diesel generator will fire low-sulfur distillate oil. The MFG facility will still meet SWCAA requirements with the inclusion of the duct burners. Based on the revised emissions calculations for the 319-MW facility, the MFG Project will remain a 'minor source' of air emissions for Prevention of Significant Deterioration (PSD) purposes. Final approval of the amended application is expected in February 2002. BPA will not interconnect the MFG Project until MFG obtains all necessary permits.

MFG has requested BPA to integrate the power from their MFG Project into the FCRTS at BPA's Longview Substation. Power generated at the MFG Project will be delivered to the regional transmission grid via a proposed new 230-kilovolt (kV) transmission line connecting the generation facility to the Longview Substation Annex. The new transmission line would be about 0.25-mile long and would require acquisition of a new 75-foot right-of-way adjacent to the existing 115-kV Longview-Cowlitz No. 1 transmission line. From the generation facility the proposed transmission line would be located on two to three new single-pole steel structures utilizing concrete pilings; as the line approaches Longview Substation, two to three new H-frame structures would be used. Construction of the proposed transmission line would require that structures supporting existing 115-kV circuits near the Longview Substation be lowered. This would allow the new 230-kV transmission line to cross over the existing lines and enter the Longview Substation Annex yard. Power generated at the MFG facility will be available for purchase in the wholesale power market, possibly to a local industrial customer, and/or to BPA. However, no BPA power purchase is planned at this time. Recently, demand for electricity on the West Coast has been greater than its supply, and fluctuating wholesale market prices have reached record highs. The MFG Project will help serve resource demand in the long term.

# PUBLIC PROCESS AND CONSIDERATION OF COMMENTS

Consistent with BPA's tiered ROD strategy for the BP EIS, a public process for the MFG Project was conducted. A public hearing on the proposed MFG Project was held by the City of Longview. The review processes for State and local permits included discussions of BPA's potential role in the MFG Project and provided additional opportunities for public comment. In addition, BPA invited comments at a BPA-hosted open house and via a letter mailed to the public.

Public participation opportunities included:

- 1. The City of Longview's public meeting held in Longview, Washington, on March 20, 2001, at the Cowlitz County Public Utility District (PUD) Building.
- 2. The 15-day City of Longview's solicitation of public comment on the SEPA Checklist that ended on February 12, 2001.
- SWCAA's 30-day request period for public comment on its Preliminary Determination of Order of Approval (air permit) for MFG Project's original 248-MW proposal.
- 4. An additional 30-day public comment period will be conducted by SWCAA on MFG Project's amended air permit to increase the generation plant's capacity to 319 MW prior to final issuance.
- 5. A 30-day comment period on MFG Project's Public Notice for Stormwater Construction Permit Application, from March 4, 2001, to April 2, 2001.
- 6. BPA invited the public to participate in its Air Study for new generating resources, including the MFG Project, being planned in the region. An initial public meeting was held in Portland, Oregon, on April 20, 2001. In addition, a public information meeting to share the results of the study was held on August 28, 2001. The results of the Air Study are posted on the BPA website at <a href="http://www.efw.bpa.gov/cgi-bin/PSA/NEPA/SUMMARIES/air2">http://www.efw.bpa.gov/cgi-bin/PSA/NEPA/SUMMARIES/air2</a>.
- 7. BPA invited public comment on the proposed MFG Project interconnection by direct mail and by posting on the BPA Internet site from November 5, 2001, through December 6, 2001.
- 8. In addition, BPA held a public open house to discuss the MFG Project on November 28, 2001, at the Cowlitz County PUD Building in Longview, Washington.

Based on the SEPA checklist, the City of Longview issued a MDNS on January 26, 2001, for the 248-MW proposal. Responses to comments on the SEPA checklist and the MDNS were submitted to the City of Longview on May 18, 2001, for inclusion in the revised SEPA checklist. No comments were received at BPA's public open house or during BPA's 30-day comment period.

#### **ENVIRONMENTAL ANALYSIS**

Consistent with the BP ROD, the BP EIS was reviewed to determine whether offering terms to integrate the MFG Project is adequately covered within its scope. The BP EIS alternatives analyzed a range of marketing actions and response strategies to maintain a market-driven approach. The BP EIS showed that environmental impacts are determined by the responses to BPA's marketing actions, rather than by the actions themselves. These market responses include resource development, resource operation, transmission development and operation, and consumer behavior. The transmission integration of the MFG Project clearly falls within the scope of the BP EIS.

BPA's RP EIS described generating resource types, their environmental effects on a per-average-MW (per-aMW) basis, and potential mitigation. The discussion for CTs (including gas extraction, pipelines, and generation) is included in section 3.2.2.2. The RP EIS also described the environmental effects and potential mitigation associated with the construction or upgrade of transmission facilities to integrate the resources with the existing transmission system (section 3.5). The per-aMW impacts for CTs (RP EIS, Table 3-26) were incorporated and updated in the BP EIS (Table 4.3-1). The BP EIS contains an analysis of environmental impacts, including resource development and operation (section 4.3.1) and transmission development and operation (section 4.3.2). The types of construction and operation of transmission lines for this MFG Project are typically actions that the United States DOE has determined do not individually or cumulatively have a significant effect on the human environment and are categorically excluded.

The Market-Driven alternative anticipated unbundling of products and services, constructing transmission facilities for requests for non-Federal power transmission, and providing transmission access to wholesale power producers (section 2.2.3). The BP EIS also noted that, under the Market-Driven alternative, new transmission requests will depend more on customer requests than on new resource development by BPA (section 4.2.3.3). In addition, the BP EIS noted (section 4.4.1.4) that, as new CTs replace older, less efficient plants, the air quality impacts will be reduced.

## **Cumulative Environmental Impacts**

The BP EIS addressed the cumulative effects of the Market-Driven alternative and provided an illustrative numerical assessment of regional impacts (section 4.4). The assessment included air, land, and water effects based on the generic per-aMW impacts (Table 4.3-1), as well as related socioeconomic effects (section 4.3). For CTs, the air quality impacts are the key environmental concern (BP EIS, Figure 4.3-1).

With an increasing demand for electricity, several new generation projects are being proposed to meet the regional energy need. MFG Project owners are asking BPA to integrate many of these resources into the FCRTS. Because the majority of these

resources are CTs, there is a regional concern about the potential impacts on air quality. BPA initiated a Regional Air Quality Modeling Study¹ (Air Study) to provide clarifying information to the BP EIS. The scope of the Phase I Air Study included proposed power plants in Washington, the northern half of Oregon, and the Idaho panhandle. The air quality impacts of more than 45 natural-gas-fired CTs representing more than 24,000 MW in capacity were evaluated. The analysis assumed that all plants, including peaking plants, were operating at peak load with their primary fuel for the entire simulation period. The CALPUFF model was used to assess power plant sulfur dioxide (SO<sub>2</sub>), NO<sub>x</sub>, and particulate matter nominally 10 microns and less (PM<sub>10</sub>). Results were compared against established criteria for human health, *i.e.*, the National Ambient Air Quality Standards (NAAQS) and the PSD Significant Impact Levels (SILs), and the environment (nitrogen and sulfur deposition as well as visibility in sensitive areas²).

The Phase I Air Study suggested that the proposed power projects (including the MFG Project) would probably not significantly contribute to sulfur and nitrogen deposition in Class I areas, the Class I PSD Increments, regional Class II PSD Increments, or regional concentrations in excess of the NAAQS. The model simulations did suggest that the proliferation of proposed projects in the study area could potentially degrade visibility within Class I and Scenic Areas if all the projects become operational. Of all the parameters evaluated in the study,<sup>3</sup> visibility was the only criteria consistently exceeded.

When all of the projects proposed to be energized before 2004 (approximately 11,000 MW in total capacity) were modeled, regional haze from particulate and NO<sub>x</sub> emissions potentially affected some Class I/Scenic/Wilderness Areas. Haze is not currently regulated, although some Federal Land Managers (FLMs) have issued guidelines for haze.<sup>4</sup>

Because the projected regional need for resources is only about 5,000 MW to 6,000 MW over the next 5 years, and only 8,000 MW over the 10-year projection, it is doubtful that most of the proposed resources will be built. Moreover, some of this regional need will be met with renewable resources such as wind energy. In addition, there are transmission limitations for the number of resources that can be integrated. Therefore, actual impacts will not be as frequent or adverse as those predicted in the Phase I Air Study.

Phase II of the BPA-sponsored Air Study was conducted to examine the MFG Project's contribution to the overall regional haze impacts. Based on the FLM significance

<sup>2</sup> Sensitive areas include NW Class I areas, wilderness areas, and the Columbia River Gorge National Scenic Area.

<sup>&</sup>lt;sup>1</sup> Regional Air Quality Modeling Study, Bonneville Power Administration, July 2001. The Air Study is found at http://www.efw.bpa.gov/cgi-bin/PSA/NEPA/SUMMARIES/air2.

<sup>&</sup>lt;sup>3</sup> Other study criteria include: National Ambient Air Quality Standards, New Source Review/Prevention of Significant Deterioration (NSR/PSD) increment consumption, NSR/PSD Significant Impact Levels, and nitrogen and sulfur deposition.

<sup>&</sup>lt;sup>4</sup> Federal Land Managers' Air Quality Related Values Workgroup (FLAG) Phase I Report, December 2000. U.S. Forest Service, National Park Service, U.S. Fish and Wildlife Service.

criterion, the MFG Project would not significantly contribute to regional haze at any of the Class I areas within the BPA Service Area, the Columbia River Gorge National Scenic Area, or the Mt. Baker Wilderness, or any other of the areas considered in the study when the facilities considered are fired by natural gas or when other facilities potentially use fuel oil during the winter. The Phase II Air Study report is available on the BPA website at <a href="http://www.efw.bpa.gov/cgi-bin/PSA/NEPA/SUMMARIES/air2">http://www.efw.bpa.gov/cgi-bin/PSA/NEPA/SUMMARIES/air2</a>.

#### Site Impacts

As discussed above, BPA's RP EIS and BP EIS provided information about the environmental impacts of CTs and their associated pipelines and transmission facilities. Clarifying information from the Washington SEPA process shows that the potential impacts of the MFG Project are within the parameters projected in those two EISs and are consistent with Federal, State, and local environmental regulations.

Air Impacts - As reported in the SEPA Checklist, temporary emissions will occur during construction of the MFG facility. These emissions will include particulates (dust) and exhaust from operation of construction vehicles and equipment. Similar emissions will result from gas pipeline and transmission line construction activities. These emissions will be of limited duration and minimized by use of Best Management Practices (BMPs) to control dust and emissions. Air quality impacts associated with construction of the facility would be confined to the construction period, localized in extent, and are expected to be negligible.

On June 4, 2001, SWCAA issued an Order of Approval air quality permit for the proposed MFG 248-MW facility. An amended NOC application requesting approval of design and operational modifications to increase the MFG facility's capacity to 319 MW was submitted on December 7, 2001. Changes to the original permit include the addition of duct firing to increase the facility's output to 319 MW (from 248 MW), a natural-gas-fired fuel preheater, and an emergency diesel generator. Plant operating emissions will be controlled using the best available control technology (BACT). Emission controls will be applied to the CT and HRSG duct burners, fuel preheater, and emergency generator to control emissions of carbon monoxide, nitrogen oxides, sulfur dioxide, particulate matter, and toxic air pollutants.

AirPermits.com completed an extensive air quality analysis of the proposed facility for the NOC application and its amendment as well as the SEPA Checklist. The analysis describes the air pollution control technologies proposed at the MFG facility; documents the resulting emissions of criteria pollutants, including  $NO_x$ , CO,  $SO_2$ , volatile organic compounds (VOCs), air toxics, and  $PM_{10}$ ; and reports the results of the modeling analysis used to predict the effect of those emissions on ambient air quality levels. Dispersion modeling conducted for the NOC predicted that emissions will not have a substantial effect on ambient air quality. The analysis compares the predicted ambient air quality impact of emissions from criteria pollutants ( $NO_x$ , CO,  $SO_2$ , VOCs, and  $PM_{10}$ ) to SILs defined in the Environmental Protection Agency's PSD regulations, and to the NAAQS and Washington Ambient Air Quality Standards. Model results presented in

the amended NOC indicate that neither national nor state ambient air quality standards for criteria pollutants will be exceeded. The analysis also concluded that the predicted toxic pollutant emissions will not exceed "acceptable source impact levels" established by the Washington State Department of Ecology (WDOE) and will not exceed any specified health risk thresholds. Based on the results of the analysis, it is concluded that the MFG Project will not pose an adverse threat to the maintenance of the local or regional ambient air quality standards or to the health and welfare of the general public. Final approval of the amended application is expected in February 2002.

**Water Impacts -** The Expanded SEPA Checklist evaluates potential erosion impacts and impacts to surface water features, wetlands, 100-year floodplains, surface water and ground water withdrawals and waste discharges, and stormwater runoff.

In addition to the options included in the original SEPA document, Mirant (the MFG Project sponsor) is currently negotiating an agreement with Weyerhaeuser to potentially use the Weyerhaeuser plant's non-contact cooling-water or filtered water as the MFG Project's primary cooling-water supply. If selected, preliminary plans include a pipeline approximately one-mile in length that would be built from the Weyerhaeuser complex to the MFG Project site. The pipeline would exit Weyerhaeuser property and pass under Industrial Way before crossing the Cowlitz Drainage District's canal via an exiting pipe bridge. The pipeline would then be routed along Prudential Boulevard to the MFG facility site. The discharge pipeline would follow the identical route in the opposite direction back to the existing Weyerhaeuser discharge. Under this option, there would essentially be no net change in the volume or quality of wastewater discharged at Weyerhaeuser's outfall to the Columbia River. In addition, this option could decrease the temperature of the outfall's discharge below its current level. Alternate supply and discharge locations may be selected after the final engineering evaluations.

A second option for cooling-water is groundwater supplied by new wells drilled on the MFG Project site. Mirant has been granted water rights to 4,370 acre-feet per year with a maximum withdrawal of 2,700 gallons per minute (gpm). The total amount of certified and claimed groundwater rights, in a one-mile area around the MFG Project site, is about 26,500 gpm. The additional groundwater withdrawal potentially would result in a groundwater level decrease of a few feet at nearby properties. With more than 200 feet of available drawdown, this potential impact appears nominal.<sup>5</sup>

In comparison to the Weyerhaeuser cooling water option, discharge from the groundwater option would add to the total volume of discharge handled by the Weyerhaeuser outfall. However, the effluent will be a small percentage of the current volume discharged through the Weyerhaeuser diffuser.

Reclaimed water treated at a re-use treatment facility and supplied by the Cowlitz Sewer Operating Board (CSOB) wastewater treatment facility is a third option for cooling-water supply for the MFG Project. Under this option, or if discharge at the

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<sup>&</sup>lt;sup>5</sup> HWA GeoSciences, Inc. April 19, 2001. Ground Water Rights Evaluation Mint Farm Generation, LLC, Longview, Washington. Prepared for: Washington Department of Ecology. HWA Project No. 2000 171.

Weyerhaeuser facility or other direct discharge location becomes unavailable, then plant wastewater will be discharged to the inlet or outfall of the CSOB sanitary sewer system. The CSOB reclaimed-water option would not increase the volume of discharge handled by the treatment plant's outfall nor add contaminants of concern to the discharge. If cooling water obtained from Weyerhaeuser or on-site wells is discharged to the CSOB treatment facility, then discharge volume would increase.

Under any cooling-water supply option, plant wastewater will be discharged to an outfall that is approved through a National Pollution Discharge Elimination System Permit. Permit applications will be submitted when discharge agreements are finalized. All options are expected to have a minimal effect on water quality and comply with temperature and other water-quality standards for the Columbia River.

Soil disturbance associated with MFG Project construction activities could result in localized erosion and an increase in sediments in surface waters. Implementation of engineering controls and BMPs detailed in the MFG Project's Stormwater Pollution Prevention Plan (SWPPP) will control surface-water, groundwater, and runoff-water impacts during and following construction. Stormwater collected at the generation facility site will discharge into the existing stormwater system put in for the MFIP.

The proposed natural gas, water, and wastewater pipelines will not impact any wetlands. The proposed transmission line may cross wetlands, supporting a nearly homogenous stand of reed canarygrass, as it approaches the substation. If work on the transmission line affects a wetland, construction will meet the requirements of the Section 404 Nationwide General Permit for transmission line construction, and BMPs will be used to minimize erosion and water-quality impacts.

**Noise Impacts -** Construction noise levels and measures to mitigate such noise are reported in the Expanded SEPA Environmental Checklist. Appendix E of the checklist contains a noise analysis report. Estimates of operational noise levels from the generation facility are in compliance with Washington noise standards.

Land-Use Impacts - The proposed MFG facility, transmission line, and gas and water pipelines would be located within the city limits of Longview. The generation facility is located in the MFIP. The MFG facility will occupy approximately 10 acres purchased from the City of Longview. Thus, the MFG Project would occupy approximately 0.031 acre per MW, which is less than the BP EIS projection of 0.15 acre per MW. The proposed MFG Project site is designated as Heavy Industrial by the Cowlitz County comprehensive plan and the MFG Project is consistent with that designation.

CNG will provide natural gas. A new 12-inch-diameter natural gas pipeline will connect to an exiting pipeline near the intersection of Industrial Way and Washington Way. The new pipeline will be about 3,000 feet long. It will be constructed along Industrial Way, within an existing gas pipeline right-of-way, for approximately 1,000 feet. The pipeline will then turn northeast and be directionally drilled or bored under the Cowlitz County Drainage Improvement District Canal #6, entering the MFIP southeast of the property

line of Solvay Interox. The pipeline will then follow and parallel the Solvay Interox property line before entering the MFG site from the south. An alternative route would follow an exiting natural gas pipeline along Industrial Way.

The one-quarter-mile-long segment of the proposed 230-kV transmission line, from the MFG Project site to BPA's Longview Substation, would cross an area zoned as a manufacturing district. A new 75-foot-wide right-of-way will be acquired adjacent to BPA's existing 115-kV Longview-Cowlitz No. 1 transmission line right-of-way. No occupied buildings will be displaced by the MFG Project.

From Industrial Way, the MFG Project would be clearly visible from the south entrance to the MFIP. The plant exhaust stack, at 165 feet tall, will be the tallest structure at the MFG Project plant site. Although it would be a new facility, it is similar to other large industrial facilities in the area. In addition, the generation facility will become a less dominant feature as other industrial facilities are built nearby.

Impacts to views near the transmission line will be minimal. The new transmission line will be constructed in an industrial area and would be located adjacent to an existing transmission line. The new transmission line will add to the overall industrial appearance of the area but will not be a visually dominant feature. The new transmission line will not be visible from any existing residences.

The MFG facility, the gas pipeline, and the transmission line will not displace any recreational or residential uses.

Socioeconomic and Public Facility Impacts - The MFG Project is located in the MFIP being developed by the City of Longview. Located at the intersection of Prudential Way and Industrial Way, these roads will be used to access the site. It is anticipated that during construction, delivery of construction materials would average between 20 and 30 truck trips per day. During normal MFG Project operation, approximately 20 plant employees and occasional maintenance workers would be the only sources of traffic. It is expected that, on average, delivery of plant supplies would generate about one daily truck delivery. Although construction traffic would temporarily increase traffic loads, post-construction traffic volumes would be low. Industrial Way can accommodate the anticipated increase in traffic volume, as the current volume is well within its limits. No new roads or road improvements will be needed or required for the MFG site, the gas pipeline, or the transmission line.

During construction, employees involved in building the facility would average about 150 workers with the peak workforce being about 250 workers. The MFG Project is expected to generate about 20 permanent jobs. Given this small increase in employment, an increased need for public services such as fire protection, police protection, health care, and schools is not expected. Upon completion, the value of the MFG Project will be approximately \$140 million and operation of the MFG Project would result in increased tax revenues.

The CSOB will provide a sanitary sewer connection and the City of Longview will provide a potable water line. Cowlitz PUD will provide power during construction. Natural gas for the plant operation will be supplied and delivered by CNG.

**Fish, Wildlife, and Vegetation Impacts -** The SEPA Expanded Environmental Checklist provides information on plants, fish, and wildlife that could be impacted by the MFG facility, the gas pipeline, and the transmission line.

Approximately 10 acres of native and invasive grasses and herbs will be removed by site development. All existing vegetation will be removed or replaced by buildings, pavement, or gravel, or landscaped with grasses and trees. Disturbed areas along the transmission line and pipeline routes will be reseeded and restored to preconstruction conditions. No fish-bearing waters are located within or adjacent to the MFG site.

Consultation with the National Marine Fisheries Service (NMFS) and the United States Fish and Wildlife Service and a site inspection concluded that no known threatened or endangered plants, animals, or their habitat are known to occur on or near the proposed MFG site, gas pipeline, or transmission line. Bull trout, a Federally listed threatened species, are reported by NMFS as potentially present in the Columbia River. There are no existing salmonid-bearing streams on the MFG Project site and there will be no direct or indirect impacts to waterbodies or salmonid habitat. Runoff will be captured on-site and treated in the detention facilities before being discharged through the existing stormwater systems as approved by the City of Longview. MFG Project cooling water will be either returned to Weyerhaeuser where it will be discharged through the existing outfall, discharged at an alternate location authorized by WDOE, or discharged through the CSOB water treatment facility. There would be no significant increases in the volume of water discharged at the Weyerhaeuser facility and no significant pollutants would be added to the wastewater discharge. Use of the Weyerhaeuser facility non-contact cooling water by the MFG Project should result in an overall decrease in the wastewater stream's discharge temperature. No impact would occur to Bull Trout or their habitat. The MFIP and all anticipated facilities within the MFIP were previously permitted and NMFS and the Corps of Engineers provided Endangered Species Act clearance.

#### Mitigation

The Council on Environmental Quality Regulations for Implementing the NEPA (40 CFR § 1505.2(c)) require a ROD to "state whether all practicable means to avoid or minimize environmental harm from the alternative selected have been adopted, and if not, why they were not."

**Air -** MFG Project has adopted as mitigation all applicable and economically feasible control technologies and is in compliance with all regulatory requirements for criteria pollutants and air toxics. The modeling results from the Air Study show that MFG Project's control technologies reduce emission of pollutants below levels causing or contributing to significant environmental impacts. BACT will be applied to control emissions as follows:

- A selective catalytic reduction system will be installed to reduce NO<sub>x</sub> emissions (aqueous ammonia will be used as the reducing agent).
- Catalytic oxidation will be employed to reduce CO emissions.
- The CO oxidation catalyst also controls VOC (including toxics) emissions from the facility.
- The use of low-ash, low-sulfur fuels will minimize the PM<sub>10</sub> and SO<sub>2</sub> emissions.
- Good combustion controls will be BACT for VOCs and particulate matter.

BPA has no statutory obligation to impose additional mitigation to offset visibility impacts, and will not require it for the MFG Project.

**Water -** Engineering controls and BMPs detailed in the MFG Project's SWPPP will control surface-water, groundwater, and runoff-water impacts during and following construction of the generation facility. BMPs will also be implemented during the construction of the transmission line. During operation, wastewater discharge is expected to comply with temperature and other water-quality standards for the Columbia River.

**Noise -** Facility design will incorporate noise control measures to ensure compliance with regulatory limits as follows:

- Construction equipment used for generating plant, transmission line, and pipeline construction will be equipped with industry-standard mufflers.
- Noise enclosures will surround the gas turbine and steam turbine generators.
- A noise enclosure for the gas compressors.
- Installation of silencers for the HRSG safety reliefs. Installation of silencers for the startup vents.

#### PUBLIC AVAILABILITY

This ROD will be distributed to all interested and affected persons and agencies. Copies of the RP EIS, BP, BP EIS, BP ROD, and additional copies of this Mint Farm Generation Project ROD are available from BPA's Public Information Center, P.O. Box 12999, Portland, Oregon 97212. Copies of these documents may also be obtained by using BPA's nationwide toll-free document request line: 1-800-622-4520.

## CONCLUSION

I have decided it is in the best interests of BPA and the Pacific Northwest to offer contract terms for interconnecting and integrating the MFG Project into the FCRTS at BPA's Longview Substation. As described above, BPA has considered both the economic and environmental impacts of taking action to integrate power from the MFG Project into the FCRTS. This decision is:

- within the scope of environmental consequences examined in the BP EIS,
- consistent with the Market-Driven alternative selected in the BP ROD, and
- in accordance with BPA's transmission access tariff, and is in accordance with BPA's statutory authority to make available to all utilities any capacity in this system determined in excess to that required by the United States (16 U.S.C. 838d).

In so doing, BPA shall take measures to ensure the continuing safe, reliable operation of the FCRTS and undertake all practicable means to avoid or minimize environmental harm that might be caused by the integration of the MFG Project into the FCRTS.

This decision is based on the evaluation of the environmental impacts of MFG's 319-MW generation facility proposal. On June 4, 2001, SWCAA issued an air quality permit for MFG's original proposal to build a 248-MW generation facility. MFG submitted an amendment to this permit (SWCAA Order of Approval No. 01-2342) requesting approval of a 319-MW facility on December 7, 2001. Air quality analysis presented in the amended SEPA checklist, in addition to the Order of Approval and its amendment, concluded that the proposed MFG 319-MW facility would be in compliance with all regulatory requirements for criteria pollutants and air toxics. Final approval of the amended Order of Approval is pending review by SWCAA.

The MFG Project has or will soon fulfill all Federal, State, and local requirements for environmental concerns such as air emissions, water, wildlife species, noise, and land use. Appropriate mitigation measures such as BACT for air emissions, BMPs for water quality, sound abatement techniques for noise, and revegetation for disturbed land areas are included.

BPA contracts providing integration of power from the MFG Project into the FCRTS shall include terms requiring that all pending permits be approved. MFG will comply with terms and conditions of all permits issued pertaining to this MFG Project including the mitigation and conditions stated in its air quality permit and the City of Longview's "Mitigated Determination of Non-Significance" that are relevant to construction and operation of the MFG facilities. BPA's contracts will also include appropriate provisions for remediation of oil or other hazardous substances associated with construction and operation of related electrical facilities in a manner consistent with applicable Federal, State, and local laws.

Issued in Portland, Oregon.

/s/ Stephen J. Wright
Stephen J. Wright
Administrator and
Chief Executive Officer

2-14-02 Date