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September 8, 2008

### VIA HAND DELIVERY

Patricia S. Lucarelli, Esq. Energy Facility Siting Board 89 Jefferson Boulevard Warwick, RI 02888

Re:

The Narragansett Electric Company - d/b/a National Grid -

Rhode Island Reliability Project EFSB Application

Dear Ms. Lucarelli:

I am enclosing for filing on behalf of the Narragansett Electric Company d/b/a National Grid an original and five copies of an Application pursuant to Rule 1.6 of the Energy Facility Siting Board ("EFSB") Rules of Practice and Procedure for the construction and alteration of major energy facilities as described in the Application. The Application includes the Environmental Report for the Project (two volumes) and the Visibility and Visual Impact Assessment, prepared by Environmental Design and Research, P.C. If you need additional copies of the filing, please advise and we will provide them.

As we discussed, I am delivering copies of the filing to the members of the EFSB, to Paul Roberti (for the Attorney General), and to the City and Town Clerks and Solicitors in Cranston, Johnston, North Smithfield, Smithfield, Warwick and West Warwick.

Please acknowledge receipt of this filing on the enclosed copy of this letter and the Application and return it with my messenger. Thank you for your cooperation.

Sincerely

Peter V. Lacouture

PVL/stg Enclosures

### NIXON PEABODY LLP

Patricia S. Lucarelli, Esq. September 8, 2008 Page 2

Elia Germani, Esq. cc: Mr. Kevin M. Flynn W. Michael Sullivan, Director Paul J. Roberti, Esq. Ms. Debra A. Todd, North Smithfield Town Clerk Mark C. Hadden, Esq., North Smithfield Town Solicitor Dianne L. Ady, MPA, Smithfield Town Clerk Timothy F. Kane, Esq., Smithfield Town Solicitor Ms. Marie Bennett, Warwick City Clerk Peter D. Ruggiero, Esq., Warwick City Solicitor Ms. Debbie Tellier, West Warwick Town Clerk Timothy A. Williamson, West Warwick Town Solicitor Ms. Maria M. Wall, Cranston City Clerk Vito L. Sciolto, Esq., Cranston City Solicitor Mr. Vincent Baccari, Johnston Town Clerk

Christopher Colardo, Esq., Johnston Town Solicitor

# STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS ENERGY FACILITY SITING BOARD

In re The Narragansett Electric Company d/b/a National Grid (Rhode Island Reliability Project)

Docket No. SB-2008-\_\_\_\_

APPLICATION OF
THE NARRAGANSETT ELECTRIC COMPANY
d/b/a NATIONAL GRID
FOR LICENSE TO CONSTRUCT AND ALTER
MAJOR ENERGY FACILITIES

Counsel:

Peter V. Lacouture Nixon Peabody LLP One Citizens Plaza, Suite 500 Providence, RI 02903

September 8, 2008

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### INTRODUCTION

The Narragansett Electric Company d/b/a National Grid ("Narragansett" or "Applicant") 280 Melrose Street, Providence, Rhode Island 02907 hereby submits this application to the Energy Facility Siting Board (the "Board") for a license to construct and alter major energy facilities within the State of Rhode Island, pursuant to the applicable provisions of Rhode Island General Laws §§ 42-98-1, et seq. and the Rules of Practice and Procedure, as amended ("EFSB Rules"). Specifically, Narragansett requests the issuance by the Board of a license for the following component projects (collectively the "Project"):

- Relocate and reconstruct two existing 115 kV transmission lines (S-171 and T-172) in National Grid's existing ROW between West Farnum Substation in North Smithfield and the vicinity of the Kent County Substation in Warwick (20.0 miles).
- Construct a new 345 kV transmission line (359 Line) between the West Farnum Substation and the Kent County Substation (21.4 miles) in the space on the existing ROW created by relocation of the two existing 115 kV transmission lines.
- Install equipment at Kent County Substation to accommodate the new 345 kV line.
- Install equipment at West Farnum Substation to accommodate the new 345 kV line.
- Reconductor the S-171 and T-172 115 kV transmission lines between Hartford Avenue Substation in Johnston and the Johnston Tap Point (1.3 miles) coincident with the reconstruction of the lines.
- Reconductor the G-185N 115 kV transmission line from Kent County Substation to Drumrock Substation (1.0 mile).
- Relocate short segments of the H-17 115 kV transmission line and the 332 345 kV transmission line in the vicinity of West Farnum Substation to accommodate the new 345 kV line.
- Relocate a short segment of the B-23 115 kV transmission line to accommodate equipment additions at the West Farnum Substation.

• Relocate short segments of the L-190 and G-185 115 kV transmission lines to accommodate the equipment additions at the Kent County Substation.

See R.I.G.L. § 42-98-3 (A) (definition of major energy facility) and § 42-98-4 (license requirement).

Narragansett is filing herewith and incorporates herein an environmental report on the project ("Environmental Report; Rhode Island Reliability Project (September, 2008)) [the "ER"] in accordance with the procedures established by the Board. (In re AES/Riverside, Inc., Docket No. SB-88-1, Preliminary Decision and Order, pp. 12-14 (Order No. 8, March 13, 1989)). This application follows the organization of § 1.6(b) of the EFSB Rules.

1. The exact legal name of the applicant, if the applicant is a corporation, trust, association or other organized group, the State or territory under the laws of which the applicant was created or organized, the location of applicant's principal place of business, and the names of all states where the applicant is authorized to do business.

The Narragansett Electric Company, a Rhode Island chartered public utility.

Principal place of business:

280 Melrose Street Providence, Rhode Island 02907

Authorized to do business in Rhode Island.

2. The name, title and post office address of one person to whom correspondence or communication in regard to the application is to be addressed.

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3. <u>Identification of the proposed owner(s) of the facility, including identification of all affiliates of such proposed owners, as such term is defined in R.I.G.L.</u> § 39-3-27.

The proposed owner of the facility is The Narragansett Electric Company, a Rhode Island chartered public utility, with its principal place of business at:

280 Melrose Street Providence, RI 02907

The affiliates of Narragansett include its parent, National Grid USA and the National Grid USA Companies (all subsidiaries of National Grid Transco plc.) The corporate relationships among the National Grid USA companies is shown on Exhibit 1, attached. A listing of non-US affiliates is available upon request.

4. A detailed description of the proposed facility, including its function and operating characteristics, and complete plans as to all structures, including where applicable, underground construction, transmission facilities, cooling systems, pollution control systems and fuel storage facilities associated with the proposed facility.

The Project is described in detail in § 4 of the ER.

# 5. Site plan for each proposed location for the facility.

Project site plans are contained in Figures 2-1, 2-2, 4-1, 4-5, 4-7, 4-9 and 4-10 of the ER.

### 6. Total land area involved.

The right of way between the West Farnum Substation and the Kent County Substation is 21.4 miles long and varies between one hundred seventy (170) feet and three hundred (300) feet in width. The West Farnum Substation is approximately 6.7 acres and the Kent County Substation is approximately 8.5 acres.

### 7. Project cost.

The estimated cost of the Project is Two Hundred Forty-Four Million Nine Hundred Thousand Dollars (\$244,900,000). This estimate is a study grade estimate (+25%) and includes capital costs, escalation and AFUDC (See § 4.9 of the ER).

# 8. <u>Proposed dates for beginning of construction, completion of construction and commencement of service.</u>

The Project construction schedule is contained in § 4.10 and Figure 4-11 of the ER. Narragansett anticipates commencing construction in the third quarter of 2010 and having the facilities in service by the summer of 2012.

# 9. Where applicable, estimated number of facility employees.

After completion of construction, the Project will not require the assignment of permanent employees on site to operate and maintain the facilities.

# 10. Proposed financing for construction and operation of the facility.

Narragansett plans to provide the funds needed to pay construction costs from internal sources and, to the extent necessary, from additional financing. It is expected that any such additional financing will be provided by National Grid plc, the parent company, issuing debt to investors and making the funding available to Narragansett through intercompany borrowing and/or capital contributions. This is considered to be the most cost-effective method of raising the necessary funds, to take advantage of National Grid's size and recognition in capital markets.

# 11. Where applicable, required support facilities, e.g., road, gas, electric, water, telephone and an analysis of the availability of the facilities and/or resources to the project.

The construction and operation of the Project will generally not require support facilities and resources. The affected social environment is discussed in § 7 of the ER. The impact of the Project on the social environment is discussed in §§ 8.8 through 8.16 of the ER.

12. A detailed description and analysis of the impact, including cumulative impact for facilities other than transmission lines, of the proposed facility on the physical and social environment on and off site, together with a detailed description of all environmental characteristics of the proposed site and a summary of all studies prepared and relied upon in connection therewith. In the case of transmission facilities, such description and analysis shall include a review of the current independent scientific research pertaining to electromagnetic fields (EMF) and shall provide data on the anticipated levels of EMF exposure and potential health risks associated with this exposure.

The environmental characteristics of the Project site are described in §§ 6 (Natural Environment) and 7 (Social Environment) of the ER and the impact of the Project is described in § 8 of the ER. Data regarding the current and anticipated levels of EMF are presented in §§ 7.8 and 8.16 of the ER, respectively. A review of current independent scientific research pertaining to electric and magnetic fields is contained in the report entitled "Electric and Magnetic Field Research Update: Rhode Island Reliability Project (August, 2008)" prepared by Exponent, Inc. (Appendix B to the ER). The studies relied upon for analysis of the impact, in addition to the ER, are listed on pages 34 through 43 of the Exponent report.

13. All studies and forecasts on which the applicant intends to rely regarding the need for the proposed facility, under the statewide master construction plan submitted annually including all information, data, methodology and assumptions on which such studies and forecasts are based.

The need for the facility is discussed in § 3 of the ER. The studies and forecasts discussed in § 3 (and contained in Appendices D, E and F of the ER) describe the data, methodology and assumptions on which they are based. Narragansett filed its 2008 master construction plan which included the Project with the EFSB on December 1, 2007.

14. Complete detail as to the estimated construction costs of the proposed facility, the projected maintenance and operation costs, the estimated unit cost of energy to be produced by the proposed facility, where applicable, and the expected methods of financing the facility. For transmission lines, the applicant shall also provide estimated costs to the community such as safety and public health issues, storm damage and power outages, and estimated costs to businesses and homeowners due to power outages.

The estimated construction cost of the Project is listed in item 7, above. The projected operation and maintenance costs are discussed in § 4.9 of the ER. Financing methods are discussed in item 10, above. Unit costs of energy to be produced are not applicable to a transmission line. Safety and public health issues are discussed in §§ 4.6, 4.7 and 8.15 of the ER and the effect of the Project on service and the costs to the community are discussed in § 3 of the ER.

15. A complete life cycle management plan for the proposed facility, including measures for protecting the public health and safety and the environment during the facility's operations and plans for the handling and disposal of wastes from the facility, at the end of its useful life.

Measures for protecting the public health, safety and the environment during operation of the facility are discussed in §§ 4.6, 4.7 and 8.15 of the ER.

Plans for the handling and disposal of wastes during construction of the facility are discussed in §§ 4.4, 8.4 and 9.2 of the ER.

Transmission lines and substations typically are not "decommissioned." When their capacity or the end of their useful life is reached, the facility is typically supplemented with another line or substation, upgraded or replaced.

16. A study of alternatives to the proposed facility, including alternatives as to energy sources, methods of energy production and transmission and sites for the facility, together with reasons for the applicant's rejection of such alternatives. The study shall include estimates of facility costs and unit energy costs of each alternative considered.

Alternatives to the Project are discussed in § 5 of the ER.

Reasons for rejecting the alternatives are discussed in the same sections as the proposed alternatives.

Estimates of facility costs for the various alternatives are contained in § 5 of the ER. Unit energy costs are not relevant to transmission lines or substations.

- 17. <u>Identification of Federal agencies which may exercise licensing authority over any aspect of the facility.</u>
  - U.S. Army Corps of Engineers and Federal Aviation Administration- See § 10 of the ER.
- 18. <u>Identification of state and local governmental agencies which may exercise licensing authority over any aspect of the facility or which could exercise licensing authority over any aspect of the facility absent the Act.</u>

State and local agencies having licensing authority over the Project are identified in  $\S 10$  of the ER.

19. <u>Identification of foreign governmental agencies which must issue licenses that may affect any aspect of the facility.</u>

There are no foreign licenses required for the Project.

20. All pertinent information regarding filings for licenses made with federal, state, local and foreign governmental agencies including the nature of the license sought, copies of the applicable statutes or regulations, and copies of all documents filed in compliance with the National Environmental Policy Act, the date of filing and the expected date of decision.

The applicable statutes and regulations (including local zoning ordinances) are voluminous and will be provided to the EFSB upon request. Local zoning applications will be filed shortly after this Application. The DEM freshwater wetlands and Army Corps of Engineers applications will be filed within the next several months. The DEM freshwater wetlands permit and the Corps of Engineers permit are outside of EFSB jurisdiction. Narragansett anticipates decisions on these applications in 2009.

21. Where applicable, the applicant must provide evidence to show that the project conforms with the Rhode Island Energy Coordinating Council's policy statement entitled Rhode Island's Options for Electric Generation dated August, 1989, including any revisions or any successor to that document which may replace it as state policy.

Not applicable.

### **CONCLUSION**

This application, the Environmental Report which is filed herewith and incorporated herein, and the other supporting material clearly demonstrate that, as required by R.I.G.L.  $\S$  42-98-11(B),

- The construction of the Project is necessary to meet the needs of the state and/or region for electric energy,
- The construction of the Project is cost justified and can be expected to transmit energy at the lowest reasonable cost to the consumer consistent with the objective of ensuring construction and operation of the Project in compliance with applicable laws and regulations, and
- The construction of the Project will not cause unacceptable harm to the environment and will enhance the socio-economic fabric of the state.

For the reasons stated herein, The Narragansett Electric Company requests that the Energy Facility Siting Board grant to Narragansett, pursuant to R.I.G.L. § 42-98-1, et seq., a license to construct the Project including the following components:

- Relocate and reconstruct two existing 115 kV transmission lines (S-171 and T-172) in National Grid's existing ROW between West Farnum Substation in North Smithfield and the vicinity of the Kent County Substation in Warwick (20.0 miles).
- Construct a new 345 kV transmission line (359 Line) between the West Farnum Substation and the Kent County Substation (21.4 miles) in the space on the existing ROW created by relocation of the two existing 115 kV transmission lines.
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- Relocate a short segment of the B-23 115 kV transmission line to accommodate equipment additions at the West Farnum Substation.

Respectfully submitted,

The Narragansett Electric Company d/b/a National Grid

Michael F. Ryan

Regional President, Rhode Island

280 Melrose Street

Providence, Rhode Island 02907

By its Attorneys,

Peter V. Lacouture

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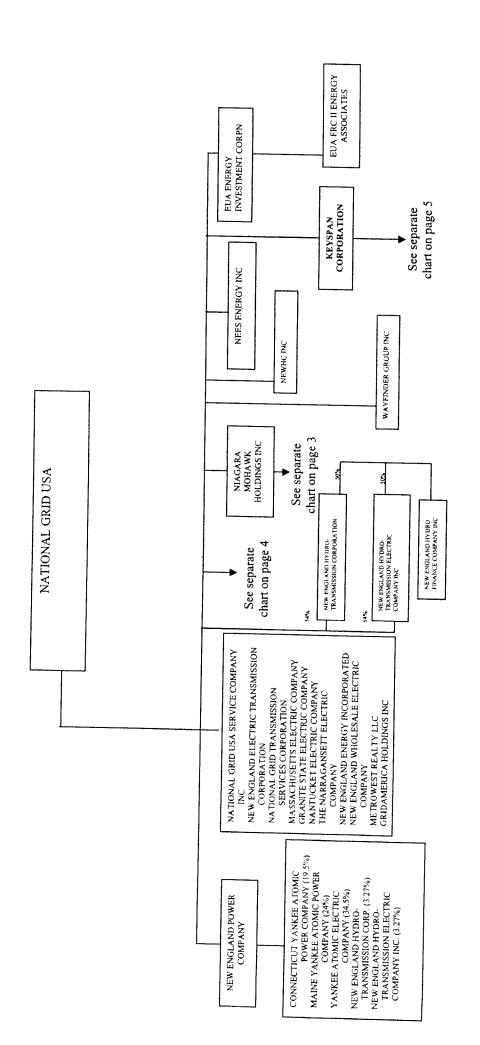
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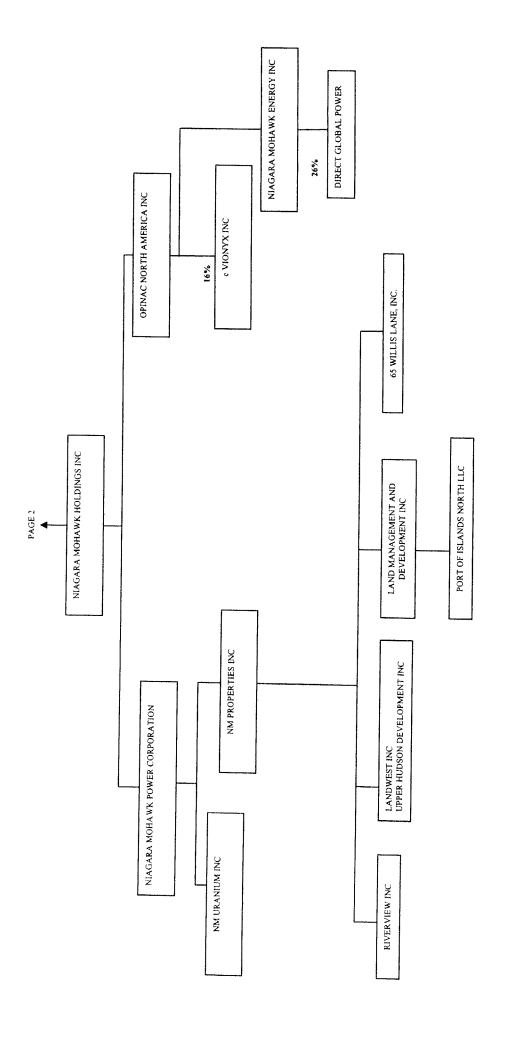
# Exhibit 1 to National Grid Application to RI EFSB (September, 2008)

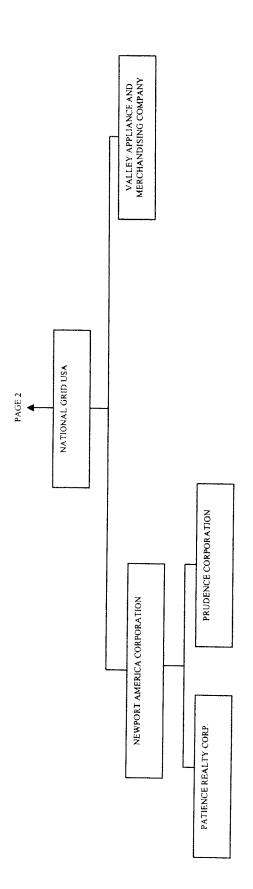
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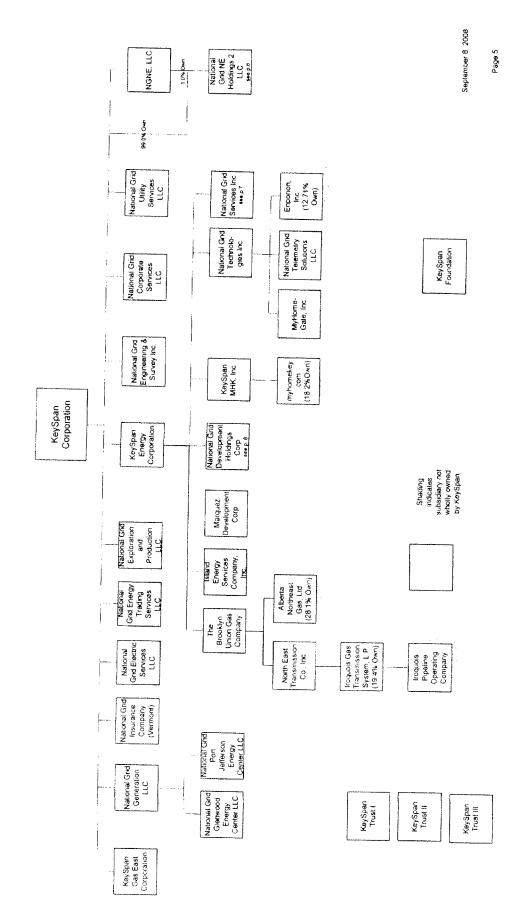
CORPORATE STRUCTURE

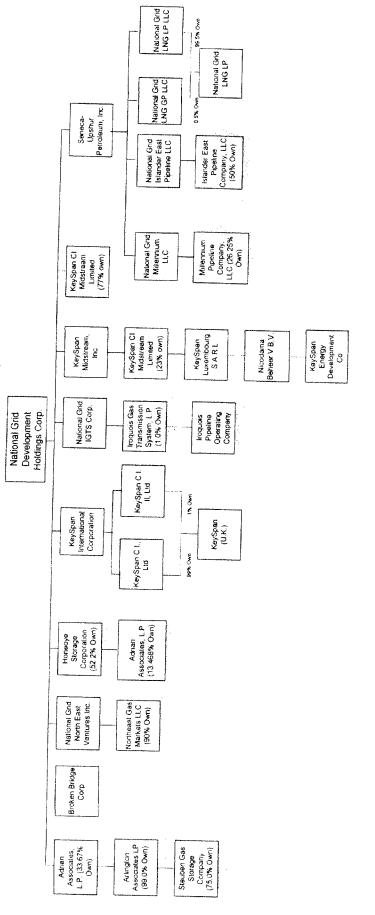
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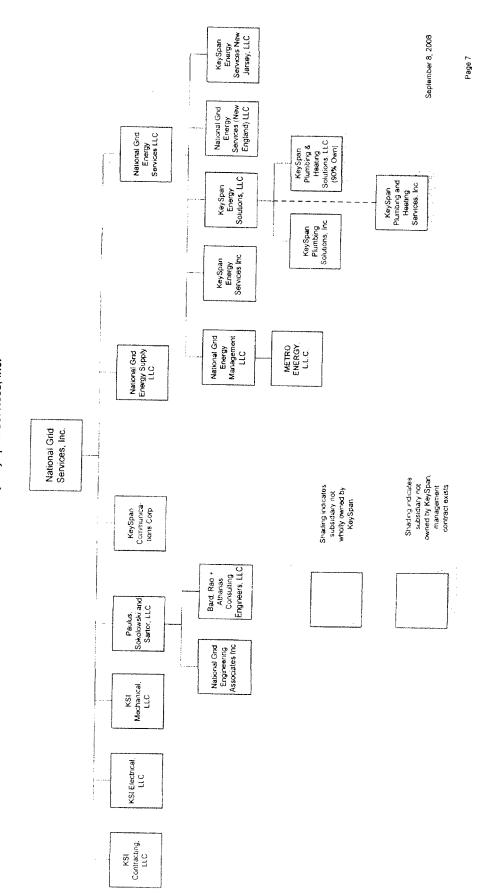


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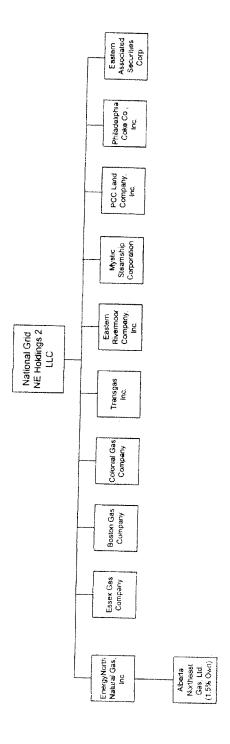
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NATIONAL GRID SERVICES, INC. formerly KeySpan Services, Inc.



Раде 8

NATIONAL GRID NE HOLDINGS 2 LLC formerly KeySpan New England, LLC



Shading indicates subsidiary not wholly owned by KeySpan